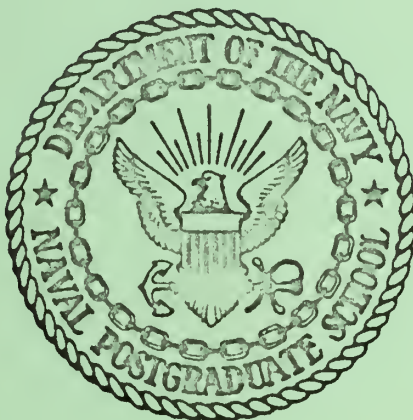


NAVAL POSTGRADUATE SCHOOL

Monterey, California



THESIS

THE NEED TO INCREASE COMPETITION
AT THE SUBCONTRACT LEVEL

by

David Alan Capizzi

December 1979

Thesis Advisor:

David V. Lamm

Approved for public release; distribution unlimited

DUDLEY KNOX LIBRARY
NAVAL POSTGRADUATE SCHOOL
MONTEREY, CA 93940

NAVAL POSTGRADUATE SCHOOL

Monterey, California



THESIS

THE NEED TO INCREASE COMPETITION
AT THE SUBCONTRACT LEVEL

by

David Alan Capizzi

December 1979

Thesis Advisor:

David V. Lamm

Approved for public release; distribution unlimited

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) The Need to Increase Competition at the Subcontract Level		5. TYPE OF REPORT & PERIOD COVERED Master's Thesis; December 1979
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) David Alan Capizzi		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Postgraduate School Monterey, California 93940		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS Naval Postgraduate School Monterey, California 93940		12. REPORT DATE December 1979
		13. NUMBER OF PAGES 121
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) Naval Postgraduate School Monterey, California 93940		15. SECURITY CLASS. (of this report) Unclassified
		16a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Subcontracting Competition		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This study was undertaken to investigate the need to increase competition at the subcontract level in Government acquisition. Current Government acquisition policies include the preference for competitive subcontracting. It was recognized that approximately 50% of all Government acquisition dollars go to subcontractors and that effective competition at that level is necessary to ensure that the Government is receiving quality items at the best prices.		

20. Abstract (Cont'd)

In investigating the nature of competitive subcontracting, interviews were conducted with Government, prime contractor, and subcontractor personnel. Areas covered in these interviews included the amount of competitive subcontracting, competitive practices and policies of each participant, and problems encountered in attempting to achieve competition.

The results of this study include: the current extent of competitive subcontracting is unknown; there are many pressures working against competition; although the Government has procedures and policies regarding competition they do not always work; and, the need to increase competition cannot be determined without further research. It is recommended that a reporting system be developed to monitor the amount of competitive subcontracting and that a mandatory subcontracting clause be developed, if more competition is desirable.

Approved for public release: distribution unlimited

The Need to Increase Competition
at the
Subcontract Level

by

David Alan Capizzi
Lieutenant, Supply Corps, United States Navy
B.S., United States Naval Academy, 1971

Submitted in partial fulfillment of
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
December 1979

ABSTRACT

This study was undertaken to investigate the need to increase competition at the subcontract level in Government acquisition. Current Government acquisition policies include the preference for competitive subcontracting. It was recognized that approximately 50% of all Government acquisition dollars go to subcontractors and that effective competition at that level is necessary to ensure that the Government is receiving quality items at the best prices.

In investigating the nature of competitive subcontracting, interviews were conducted with Government, prime contractor, and subcontractor personnel. Areas covered in these interviews included the amount of competitive subcontracting, competitive practices and policies of each participant, and problems encountered in attempting to achieve competition.

The results of this study include: the current extent of competitive subcontracting is unknown; there are many pressures working against competition; although the Government has procedures and policies regarding competition they do not always work; and, the need to increase competition cannot be determined without further research. It is recommended that a reporting system be developed to monitor the amount of competitive subcontracting and that a mandatory subcontracting clause be developed, if more competition is desirable.

TABLE OF CONTENTS

I.	INTRODUCTION -----	8
A.	OBJECTIVES OF THE RESEARCH -----	8
B.	RESEARCH QUESTION -----	8
C.	SCOPE AND LIMITATIONS -----	9
D.	RESEARCH METHODOLOGY -----	9
E.	ASSUMPTIONS -----	10
F.	REVIEW OF THE LITERATURE -----	10
G.	DEFINITION OF A SUBCONTRACT -----	10
H.	ORGANIZATION OF THE STUDY -----	11
II.	FRAMEWORK -----	13
A.	COMPETITION -----	13
B.	GOVERNMENT POLICY ON COMPETITION -----	14
C.	THE GOVERNMENT-PRIME CONTRACTOR SUBCONTRACTOR RELATIONSHIP -----	15
D.	THE GOVERNMENT ACQUISITION PROCESS -----	17
III.	BACKGROUND -----	27
A.	CONCERN REGARDING SUBCONTRACT COMPETITION ----	27
B.	THE NEED FOR COMPETITION -----	29
C.	OBJECTIVES OF THE GOVERNMENT -----	31
D.	PRIME CONTRACTOR AND SUBCONTRACTOR OBJECTIVES -	32
E.	GOVERNMENT PROGRAMS WHICH AFFECT SUBCONTRACTING	33
	1. Contractor Procurement System Review ----	33
	2. Government Consent to Subcontracts -----	36
	3. The Component Breakout policy -----	37
	4. Small Business -----	38

F. SUMMARY -----	40
IV. GOVERNMENT SUBCONTRACTING -----	41
A. COMPETITION AT THE SUBCONTRACT LEVEL -----	41
1. Competition Defined -----	41
2. Types of Items Subcontracted -----	42
3. Subcontractor Size -----	43
4. Amount of Subcontract Competition-----	44
5. The Need for Competition -----	46
6. Summary -----	48
B. COMPETITIVE PRACTICES -----	48
1. Prime Contractors -----	48
a. Source Selection -----	48
b. Contract Type-----	52
c. Source Development -----	55
2. Subcontractors -----	57
a. Marketing -----	57
b. New Products -----	58
3. The Government -----	59
a. CPSR -----	59
b. Government Consent to Subcontracts --	60
c. Small Business Requirements -----	60
d. Second Sourcing -----	61
e. Government Furnished Equipment -----	61
f. Subcontract Clauses -----	62
g. Contract Type -----	63
4. Summary -----	64
C. PROBLEMS IN COMPETITIVE SUBCONTRACTING -----	64

1.	Prime Contractor Problems -----	65
a.	Subcontractor Identification -----	65
b.	Buy-ins -----	66
c.	Prime Contracts -----	66
2.	Subcontractor Problems -----	67
3.	Government Problems -----	68
a.	Subcontracting Data -----	69
b.	CPSR -----	69
c.	Consent to Subcontracts -----	71
d.	Technical Data Packages -----	72
e.	Small Business -----	73
f.	Standardization -----	75
4.	Summary -----	76
D.	SUMMARY -----	76
V.	CONCLUSIONS/RECOMMENDATIONS -----	77
A.	CONCLUSIONS -----	77
B.	RECOMMENDATIONS -----	80
C.	CONTRIBUTION OF THE STUDY -----	82
D.	AREAS FOR FURTHER RESEARCH -----	83
APPENDIX A	RESEARCH QUESTIONS -----	84
APPENDIX B	OMB CIRCULAR A-109 -----	87
APPENDIX C	DAR SUBCONTRACTING CLAUSES-----	99
APPENDIX D	EXCERPT FROM DOD MANUAL FOR CONTRACTOR PROCUREMENT SYSTEM REVIEWS -----	113
BIBLIOGRAPHY	-----	117
INTERVIEWS	-----	119
INITIAL DISTRIBUTION LIST	-----	121

I. INTRODUCTION

A. OBJECTIVES OF THE RESEARCH

The Government depends on prime contractors to make and administer subcontracts. It has no direct control or privity of contract with these subcontractors. Since approximately 50% of all Government procurement dollars result in subcontracts there is great concern throughout Government over the manner in which subcontracts are awarded. The Government policy on procurement is that it will be accomplished on a competitive basis to the maximum extent practicable. Competitive procurement is believed to result in the lowest price and best product. This idea also extends to the subcontracting efforts. The purpose of this study is to investigate the nature of competition at the subcontract level in Government acquisition and to analyze methods for potentially improving or increasing this competition.

B. RESEARCH QUESTION

In order to fully explore the nature of competition at the subcontract level, it is necessary to answer several questions: What is competition? What are the Government's policies toward competition at the subcontract level? What is the current nature of competition at the subcontract level? How are the Government, prime contractors, and subcontractors influencing the degree of competition currently being achieved? What problems do they encounter? What can

the Government do to increase competition at the subcontract level?

C. SCOPE AND LIMITATIONS

Since approximately 75% [34] of Government acquisition dollars are spent by the Department of Defense (DOD), this study is essentially limited to DOD acquisitions of material, equipment, and systems, both major and less than major. Further, the study does not consider such concerns as Foreign Military Sales, foreign procurement, subcontracts beyond the first tier, or service contracts. This is not to imply that none of the observations provided herein can be considered applicable to such cases, but only that data was not collected to support such conclusions.

D. RESEARCH METHODOLOGY

The data expounded upon in this study were collected through an examination of acquisition literature at the Naval Postgraduate School Library, the Defense Logistics Studies Information Exchange, and the Defense Documentation Center; personal interviews with Government officials at organizations such as the Office of Federal Procurement Policy (OFPP), Office of the Secretary of Defense, various military systems commands and project offices, and local purchasing offices; personal interviews were conducted at private industries such as General Dynamics, Rockwell International, Hughes Aircraft, TRW, Garrett Air Research Corporation, and Sargent Industries; and telephone interviews were conducted in cases where appropriate personnel could

not be personally contacted. The majority of the data in Chapter IV was collected during personal interviews. Questions were developed for Government, prime contractors, and subcontractors prior to research and are included in Appendix A.

E. ASSUMPTIONS

Throughout the report it is assumed that the reader is knowledgeable of standard DOD contracting terminology, procedures, and concepts, as well as the structure of the Federal acquisition policy-making system.

F. REVIEW OF THE LITERATURE

Literature available in the area of competitive subcontracting is limited to references in Government regulations such as the Defense Acquisition Regulations (DAR) and Government sponsored studies and theses such as "Subcontracting Policy in Major Systems Acquisitions." Most literature concerned with competition centered on competition between the Government and the prime contractor. Subcontracting literature included only vague references to competition. A key deficiency in the literature was the lack of statistics and actual cases concerning competitive subcontracting.

G. DEFINITION OF A SUBCONTRACT

A review of the literature revealed a number of definitions of a subcontract and subcontractor. DAR defines a subcontract as "any contract as defined in 1-201.4 other

than a prime contract, entered into by a prime contractor or a subcontractor, calling for supplies or services required for the performance of any one or more prime contracts.

[7:8-101.24] DAR defines subcontractor as "any supplier, distributor, vendor or firm which furnishes supplies or services to or for a prime contractor or another subcontractor." [7:14-001.5] More complete definitions of subcontract and subcontractor were published by the Department of Labor's Office of Federal Contract Compliance and will be the definitions applicable throughout this paper.

The term subcontract means any agreement or arrangement between a contractor and any person (in which the parties do not stand in the relationship of an employer and employee)

(1) for the furnishing of supplies or services or for the use of real or personal property, including lease arrangements, which, in whole or in part, is necessary to the performance of any one or more contracts; or

(2) under which any portion of the contractor's obligation under any one or more contracts is performed, undertaken, or assumed.

The term subcontractor means any person holding a subcontract and, ...any person who has held a subcontract subject to the order. The term first tier subcontractor refers to a subcontractor holding a subcontract with a prime contractor. [29:449]

H. ORGANIZATION OF THE STUDY

This study consists of several related topical discussions. Chapter II describes the concept of competition, the Government acquisition process, and the relationship between the Government prime contractor and subcontractor. Chapter III describes the concern being expressed about

competition, the objectives of the Government and its contractors in acquisition, the benefits of competition, and current Government programs and policies which affect competition at the subcontract level. Chapter IV presents the results of interviews conducted with various contracting and policy personnel and an analysis of these results. Chapter V presents the conclusions and recommendations resulting from the data in Chapter IV and areas for further study.

II. FRAMEWORK

A. COMPETITION

Competition is defined in Webster's New Collegiate Dictionary as "the effort of two or more parties, acting independently, to secure the custom of a third party by offering most favorable terms. The general definition of competition used by the Department of Defense (DOD) is:

An environment of varying dimensions relating to buy-sell relationships in which the buyer induces, stimulates, or relies on conditions in the marketplace that causes independent sellers to contend confidently for the award of a contract. / 5:1A-B3 /

This definition, although broad enough to encompass many types of competition, is too general to be used on a working basis. The most specific working definition of competition as used in Defense acquisition is contained in the Defense Acquisition Regulations under the subject of competition.

Price competition exists if offers are solicited and (i) at least two responsible offerors, (ii) who can satisfy the requirements, (iii) independently contend for a contract to be awarded to the responsive and responsible offeror submitting the lowest evaluated price, (iv) by submitting price offers responsive to the expressed requirements of the solicitation. Whether there is price competition for a given procurement is a matter of judgment to be based on evaluation of whether each of the foregoing conditions is satisfied. Generally, in making this judgement, the smaller the number of offerors, the greater the need for close evaluation. / 7:3-807.7 /

The DAR goes on to say that even if the above conditions are met, there are some circumstances under which competition is still not present. Price competition is assumed to

be adequate unless it is determined that:

- (i) the solicitation was made under conditions that unreasonably deny to one or more known and qualified offerors an opportunity to compete;
 - (ii) the low competitor has such a determinative advantage over the other competitors that he is practically immune to the stimulus of competition in proposing a price (e.g., a determinative advantage because substantial costs, such as start up or other nonrecurring expenses, have already been absorbed in connection with previous sales, thus placing the competitor in a preferential position); or
 - (iii) the lowest final price is not reasonable and this finding is supported by an enumeration of the facts upon which it is based; provided, that such a finding is approved at a level above the contracting officer.
- [7:3-807.7]

The DAR definition of price competition will be the basis upon which the term competition will be discussed in this study.

B. GOVERNMENT POLICY ON COMPETITION

The Government policy on competition is that it is the preferred method of acquisition. The preference for competitive procurement is demonstrated by the requirement to use the formal advertising method for solicitations. DAR states:

Purchases and contracts for supplies and services shall be made by formal advertising in all cases in which the use of such method is feasible and practicable under the existing conditions and circumstances. [7:1-300.2]

This formal advertising method provides unlimited opportunity to any potential bidder to make a proposal on the solicitation and therefore is a competitive practice.

Even in situations where formal advertising is impractical, the Government requires the use of competition.

DAR goes further to state:

All procurements, whether by formal advertising or by negotiation, shall be made on a competitive basis to the maximum practicable extent. [7:1-300.1]

Since subcontract dollars are a significant portion of the cost of many acquisitions, the Government also has a definite policy on the use of competition by its prime contractors in making subcontracts for Government prime contracts. DAR states that all subcontractors shall be selected "on a competitive basis to the maximum extent possible" in negotiated prime contracts over \$10,000. [7:104.40]

C. THE GOVERNMENT-PRIME CONTRACTOR-SUBCONTRACTOR RELATIONSHIP

The Government is bound to the prime contractor by the terms of a contract. A contract is an agreement for the procurement of supplies or services, enforceable by law, between two or more competent parties, to do or not do something not prohibited by law, for a legal consideration. [5:1A-B4] The prime contractor may, in his own right, award a subcontract to another firm in order to fulfill the prime contractor's obligation to the Government. The Government has a legal right as to the performance of the prime contract and the prime contractor has a legal right over the subcontractor as to the performance of the subcontract. The Government, however, does not have any legal authority over the subcontractor in the performance of a subcontract under a Government prime contract. The barrier between the Government and the subcontractor is known as the "wall of privity." [29:456]

The only control the Government has over the subcontractor is the control exercised over the prime contractor through the terms of the prime contract. The Government makes prime contracts to achieve its contractual aims and, if there are to be subcontractors, their choice and control is normally up to the prime contractor. Subcontract problems, though, may have significant impact on cost, schedule, and performance, therefore in some instances the Government retains the right to "review" the prime contractor's decisions in connection with make-or-buy programs or decisions. These reviews and subsequent consents or denials are not considered as legal approvals however, and give no basis for subcontractor appeal to the Government. A subcontractor further has no contractual rights against the Government upon the termination of a prime contract, only against the prime contractor or intermediate subcontractor with whom he has contracted. [7:8-209.1]

In some contracts the Government requires the prime contractor to "flow down" certain prime contract provisions to his subcontractors. These flow down provisions, when entered in the subcontract, still do not establish a relationship between the Government and the subcontractor.

In summary, the Government's contractual rights extend only as far as the terms of the prime contract and only to the prime contractor. There is no direct relationship between the Government and the subcontractor and any communication or other dealings concerned with a specific subcontract under a Government prime contract should take

place through the prime contractor.

D. THE GOVERNMENT ACQUISITION PROCESS

The Government's acquisition process, as related to subcontracting, can be divided into two distinct phases; preaward and postaward activities. It is during these two phases that the Government must take steps to ensure that its prime contractors are achieving the goal of competitive subcontracting. The primary areas where the Government can influence competition are through the source selection process in the preaward phase and during contract administration in the post award phase.

The preaward phase of the acquisition process begins with the identification of a requirement or need. In most cases, the requirement can be specifically identified by the user using established standards or specifications. This identification normally is applicable to items which have been in production for some time. In other cases, there may not be established specifications or standards and development of a new item may be required. It is important that the user and the procuring activity agree exactly on what is required when preparing to acquire an item or service. This calls for planning, communication, and cooperation between the user and the purchasing activity. This coordination normally begins with an acquisition plan which outlines the requirements and steps to be taken in the process. In major system acquisitions this plan is developed in the system's project office. This project

office consists of a staff dedicated to the development of the specific system under the direction of a project manager. The staff consists of personnel from several functional areas including contracting, engineering, quality assurance, finance, and any other expertise deemed necessary by the project manager for the successful completion of the project. In the local purchasing activities, the staff is not specialized for a single acquisition or type of item, but handles a wide spectrum of requirements which do not qualify for major systems procedures.

Identification of the requirement is an activity which is quite different between local purchasing activities and major systems acquisitions. Local purchasing activities normally rely on the user activity to specifically identify a requirement. In major systems, however, there is a process to identify the mission need vice a specific requirement. OMB Circular A-109 expressed the concern of the Commission on Government Procurement over the effectiveness of the management of major systems acquisitions. In order to improve the acquisition process, A-109 directed that all major system acquisition programs would develop and use solicitations based on mission need rather than specified equipment. This policy would provide the Government with a greater number of alternative proposals and enable prime contractors to become more creative. [21:9] This process is described in Appendix B.

After identification of the requirement or need, the

method of procurement is determined by the contracting officer or the project manager. There are two primary methods of procurement used in Government purchasing: formal advertising and negotiation. Advertised procurement is required by DAR [7:1-300.2] except under specific circumstances such as experimental, developmental, or research work, classified purchases, technical or specialized supplies whose production requires a substantial investment or an extended period of preparation. There are seventeen exceptions contained in DAR. [7:3-200] There are five basic steps in formally advertised acquisitions including preparation of the Invitation For Bid (IFB—a complete purchasing package including all contractual requirements and terms); distribution of the IFBs to a wide number of bidders (a notice is published in the Commerce Business Daily for any potential suppliers to request a copy of the IFB); public opening, reading, and recording of the bids; evaluation of the bids; and award of the contract to the lowest responsible bidder.

Procurement by negotiation is a much more flexible system. The Contracting Officer can select the suppliers to whom he will submit the Request For Proposal (RFP), all negotiations may be kept private, and an offeror may change his proposal as a result of negotiation. It is in the area of negotiated procurements that the Contracting Officer is able to exert more authority, through his interaction with the contractor, and gain a more detailed view

of the contractor's procurement systems.

After the method of procurement is determined, the solicitation document is prepared, the IFB for formally advertised and the RFP for negotiated procurements. These documents include items such as contract type, clauses, specifications, delivery schedules, and any other items required for the contractor to develop a proposal. When preparing these documents, contracting and technical personnel are required to avoid using requirements and specifications which limit the number of competitors or the ability of the prime contractor to compete for subcontracts. The use of specifications taken directly from manufacturer's products or the use of brand names could limit subcontract competition.

Evaluation of proposals is simple in formally advertised acquisitions. Award goes to the lowest responsive and responsible bidder. That is "the bidder whose bid, conforming to the invitation for bids, is most advantageous to the government." [15:555] The common interpretation of this is that the lowest bidder gets the contract.

In negotiated procurements, much more time is spent in evaluating a contractor's proposal. Price and cost analysis are commonly used as are preaward surveys conducted by either in-plant or regional contract administration personnel.

One of the primary evaluation factors considered in negotiated procurements is the contractor's make-or-buy program. A make-or-buy-program is "that part of a contractor's written plan which identifies the major subsystems,

assemblies, subassemblies, and components to be manufactured, developed, or assembled in his own facilities, and those which will be obtained elsewhere by subcontract."

[7:3-902.2] According to DAR, the contractor has the basic responsibility for make-or-buy decisions and his recommendations should be accepted unless they adversely affect the Government's interest. With this in mind, DAR requires that the following factors be considered in evaluation of the prime contractors' make-or-buy plan:

- (1) whether the contractor has justified the performance of work in plant which differs significantly from his operations;
- (2) the consequences of the contractor's projected plant work loading with respect to overhead costs;
- (3) the contractor's consideration of the competence, ability, experience, and capacity available in other firms, especially small business and labor surplus area concerns;
- (4) the contractor's make-or-buy history as to the type of item concerned;
- (5) whether small business and labor surplus area concerns will be able to compete for subcontracts; and
- (6) other elements, such as the nature of the items, experience with similar items, future requirements, engineering, tooling, starting load costs, market conditions, and the availability of personnel and materials.

[7:3-902.3]

The final area in the preaward phase of Government contracting in which the Contracting Officer can influence the prime contractor's subcontracting policies is in the type of contract used. Contract types are divided into two groups: fixed price and cost reimbursement. The contract type determines the amount of flexibility given to the

prime contractor under the terms of the contract. A firm-fixed-price (FFP) contract is simply an agreement by the Government to the contractor to pay a specified price to the contractor when the latter delivers the required items. There is no flexibility as to price and the seller has an incentive to produce efficiently since he bears all of the risk. A cost-plus-fixed fee (CPFF) contract, on the other hand, guarantees to the contractor that the Government will pay all costs plus a specified fee and gives no incentive to the contractor to produce efficiently, placing all of the risk on the Government. These two types of contracts are at opposite ends of the risk sharing spectrum. There are several other contract types which use a more equitable risk sharing concept. Some of these are:

Fixed-Price with Escalation (FPE)-used for contracts covering a long period of time wherein there may be an upward or downward change in price as a result of changes in the material or labor rates;

Fixed-Price Incentive Fee (FPIF)-used when a reasonable target price can be established. A formula is used providing for a target price, a ceiling price, and a variable profit formula. This incentivizes the contractor to become efficient to increase his relative profit;

Fixed-Price Level of Effort (FFP/LOE)-used when work cannot be precisely described in advance, but the level of effort can be. The seller is obliged to a specific level of effort, for an agreed upon time, and for an agreed upon fixed price.

Cost-Plus-Award-Fee (CPAF)-used to incentivize a particular criteria against which a contractor's performance will be evaluated. This contract contains an estimated cost, a base fee (may be zero), a maximum fee and an award fee based on performance against the criteria;

Cost-Plus-Incentive Fee (CPIF)-a variation of the FPIF using a tentative fee based on estimated costs, target costs, and a variable profit formula. [5:2C3-21]

Evaluation of the requirement and the availability of the item or capabilities of industry usually determine the type of contract. The type of contract has an impact on the contractor's ability and desire to subcontract. If awarded a contract where he has little or no flexibility (FFP for example), the prime contractor's incentive is to achieve the best terms possible and competition should be the method used. The same applies when using a CPAF contract if the evaluation criteria include competition. In a CPFF contract, however, since the fee is guaranteed and costs covered by the Government, there is no incentive to compete subcontracts.

Contract clauses are another means to increase subcontract competition in the preaward phase. DAR requires several different subcontract clauses to be used depending on the type of contract. One clause required in negotiated contracts over \$10,000, except FFP contracts where the award is on the basis of effective price competition, is:

Competition In Subcontracting (1962 APR)

The contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum extent consistent with the objectives and requirements of the contract. [7:7-104.40]

Other required clauses are contained in Appendix C and include the requirements for consent to subcontracts and approval of the contractor's procurement system. The requirements for utilization of small and minority business and labor surplus areas are also included in these clauses. Besides these clauses, the Contracting Officer may use any other clause he deems necessary for the proper performance

of the contract.

There have been several areas cited in the preaward phase of the acquisition process which enable the Contracting Officer to influence the prime contractor's use of competitive subcontracts. These include the use of nonrestrictive specifications, preparation of the solicitation documents to include sufficient information for contractors to identify potential subcontractors prior to award, evaluation of make-or-buy plans, input from preaward surveys, the use of various contract types, and the use of contract clauses.

The post award phase of the acquisition process is primarily dedicated to the monitoring of contract performance. Due to the large number of contracts awarded by a contracting officer and the amount of time and manpower required to properly administer the contract after award, the Procuring Contracting Officer (PCO) normally forwards the awarded contract to a Contract Administration Organization (CAO) for monitoring. The Navy and Air Force have several inplant CAOs called Navy Plant Representative Offices (NAVPROs) and Air Force Plant Representative Offices (AFPROs). These service CAOs are located in plants which require close service monitoring of special programs. The Defense Contract Administration Service (DCAS) is responsible for all contract administration in plants not under the cognizance of a NAVPRO or AFPRO. DCAS also has several inplant organizations called DCASPROs. Besides these there are regional offices to conduct contract administration for contractors which do not require an implant representative.

The DCAS, NAVPRO, and AFPRO organizations are the primary DOD contract administration organizations. Besides these, though, the PCO may retain contract administration in his own organization if he feels it necessary.

The primary goals of a CAO are:

1. To ensure that every right of the government is properly observed.
2. To maximize the degree to which the contractor effectively and efficiently produces an end item which meets the requirements of the government.
3. To evaluate both formal and informal contractor data sent to the procuring activity to determine their credibility and utility to the government.
4. To ensure that the information needed for sound government decision making is provided.
5. To alert government managers to potential problem areas.
6. To advise higher echelons on all matters requiring a detailed knowledge of the contractor's operations and progress on a specific contract.
7. To accomplish specific functions such as those assigned in DAR 1-406, or others as delegated. 10:1-1-4_7

Administration of specific contracts comes under the authority of the Administrative Contracting Officer (ACO). As a representative of the Government, an ACO may administer any Government contract including amendments. Two of the specific functions of the ACO and CAO in relation to sub-contracts are:

1. to review, approve, or disapprove and maintain surveillance of the contractor's procurement system; and
2. to consent to the placement of subcontracts. 7:1-406_7

In order to accomplish these two objectives, the Contractor

Procurement System Review program and the consent to sub-contracts clauses were developed. These two areas will be covered in detail in Chapter III.

Thus, in the post award phase of the acquisition process the Government influence over the primecontractor's sub-contracting policies is as a result of the monitoring of the awarded contracts by the cognizant CAO. The results of that monitoring may impact on the final determination of contract price or may even impact on the decision to terminate a contractor for noncompliance with the terms of the contract.

III. BACKGROUND

A. CONCERN REGARDING SUBCONTRACT COMPETITION

Concern over the use of competition in Government procurement has been increasing due to the large number of dollars spent annually and the apparent overall decrease in the percentage of competitive procurements. This concern was recently expressed by the Deputy Secretary of Defense who stated:

During recent years, the percentage of Defense contract dollars awarded as a result of competition has declined. This decline is of increasing concern to the Secretary of Defense and to the Congress. During congressional hearings this year, Dr. Brown, Dr. Perry, and I have been questioned about this problem. It is apparent that we must direct out attention toward a reversal of the declining trend in competition. [11:1]

One of the prime areas which should be addressed in increasing competition in Government acquisition is the area of subcontracts. Although there is no privity of contract between the Government and subcontractors, the fact that approximately 50% of all Federal acquisition dollars spent go to subcontractors, make this area extremely important. [20:1] There is high level concern that subcontract competition is not being achieved sufficiently through existing contracting procedures and practices. There is also high level concern over the lack of statistical information required to measure the extent of subcontract competition. Testimonies before the Joint Economic Committee of Congress have supported this concern. Some of the

comments have included:

Generally, there is not much true competition in subcontracting. My experience is that primes pay little attention to getting the best possible prices for their subcontracts, because subcontract prices can be passed on to the Government. [Vice Admiral Rickover 2:144]

Your documentation this morning (a GAO report), I think shows that in one way or another, subcontracting competition is being avoided.

...but where you have subcontracting, it doesn't make any sense that they can only get a sole source.... By and large, however, I think this would be the great exception that 99% of the time you could get competition...

[Senator Proxmire 2:145]

...we think the subcontracting area is...important, because you are talking about a prime who in turn relates to a whole series of concerns. And one of the things that the Procurement Commission is looking at very hard is how you can get more competition into the subcontracting field, because bigness is a fact of life.... The real question is whether or not in the negotiating with primes there is adequate attention also given to the subcontracting field.... [Elmer B. Staats, Comptroller General of the United States 2:145]

Military subcontracting is one area where the potential... is great, and it is the area where we have the least information. Until 1963, the Pentagon reported on the proportion of prime contracts which were subcontracted out. Such data is no longer available....

The major potential for widening the role of small business in military procurement is to increase the subcontractor ratio; and this is precisely the information which since 1963 is no longer available.

It would be helpful to know more about this large segment of the military market.... This would enable us to explore the nature of competition for subcontracts. [Dr. Murray Weidenbaum, 1:146]

The Secretary of the Navy recently published a memorandum concerning the need to increase competition in Defense acquisitions. One paragraph specifically addressed subcontract competition:

We give no visibility to subcontracts, and to the degree of competition that exists at the subcontract level. As a result significant competition acquisitions at the subcontract level are not identified and therefore, we

are not able to appreciate the actual number of U.S. industrial concerns that have received DOD dollars competitively at the subcontract level. Since approximately 50 percent of prime contract dollars result in subcontracts, the impact of competitive subcontracting should be given visibility. [20:3]

It can be seen from the preceding statements that there is significant concern at high levels of Government over the degree of competition being achieved in subcontracting.

B. THE NEED FOR COMPETITION

The use of competition promises several direct and indirect benefits for the Government. First of all, the use of competition tends to result in lower prices and greater technological achievement, or, in other words, a better product for less cost. [27:2] This is based on the theory that when firms are competing for a contract they have an incentive to bid lower and develop better products in order to win the business. Contrary to this, if a firm is a sole source for an item and is aware of its status, it has no incentive to offer a reasonable price or to improve its product.

One indirect benefit of competition is derived from the assumption that competition ensures "fairness". Congress is interested in the "fair" distribution of acquisition funds and supports the use of competition as the most practicable method for achieving this. This policy allows Congress to assume the role of an equitable and even handed distributor of the public's funds and relieves the Government of some intense public scrutiny and skepticism on the way funds are used. The scrutiny and skepticism are still

present, but less intense. [27:4]

Another benefit of competition is the reduction of dependence by the military on a few firms and an expansion of the industrial base. This expansion not only allows the military to have options for its supplies, but also helps spread the economic benefits of large procurement programs throughout the country.

There are some negative aspects to the use of competition which should be mentioned. The need for standardization in the military is a major argument against competition. Standardization allows interchangeability of parts and systems throughout the services and increases the flexibility of existing equipment. Competition tends to limit standardization through the use of more than one source in the life of an item. Different sources may produce incompatible items from the same specifications due to interpretations of the specifications and differing production techniques.

The use of Government procurement as a socio-economic tool is another argument against the use of competition. Using strict competition as a basis of award would, for the most part, exclude some small or minority run businesses and give no preference for areas which are in economic need of business. Established firms would have the edge due to their experience, size, and ability to be flexible. This would tend to limit new firms from entering the market in areas already covered by established firms.

The need for competition must be weighed against the

requirements of each individual acquisition. In some cases, socio-economic factors or standardization requirements may outweigh cost requirements. Government regulations such as DAR have been written to include rules and procedures to incorporate these considerations into each procurement.

C. OBJECTIVES OF THE GOVERNMENT

The primary objective of the Government in acquisition is to acquire goods or services to fulfill a need at the least cost to the Government. The emphasis on least cost is due to the use of public funds as constrained and budgeted by Congress. Congress controls the purse strings and is in turn answerable to the people - the source of the funds. The use of public funds is therefore under the scrutiny of Congress and the people at all times. People do not appreciate high taxes and members of Congress desire to retain their elected positions. Therefore there is significant emphasis throughout Government procurement on minimizing costs when fulfilling a requirement.

A second objective in the Government acquisition process is the implementation of socio-economic programs. It is the Government's responsibility to ensure a healthy and growing economy. Since the Government does not control the funds of individual firms, it depends on the Government acquisition process to implement its programs dealing with the economy. Incorporated into the Government's procurement regulations are requirements to comply with existing socio-economic programs.

A third objective of Government acquisition is to maintain an industrial base sufficient to cope with any major crisis such as a war. It is desired that funds be spread throughout the existing industrial base to maintain or to increase it. The Government's acquisition process again is the only direct control that the Government has to achieve this objective.

D. PRIME CONTRACTOR AND SUBCONTRACTOR OBJECTIVES

The primary objective of most businesses is to earn revenue for the owners or stockholders and for the continued existence or growth of the firm. This is true for both primecontractors and subcontractors. It is with this goal in mind that businesses negotiate their contracts. The prime contractor attempts to win the best terms possible from the Government; financial, technical, and schedule included. The prime then attempts to achieve what he considers the best terms in his favor from proposed subcontractors. The terms achieved are normally consistent with the firms current objectives, which may be to maximize profit, utilize existing production facilities, increase technical capabilities, or even to develop a new market. Thus the primecontractor may be motivated by any one of a number of goals.

The subcontractor is normally motivated by the same reasons that the prime is motivated. The size of the subcontractor has a great deal to do with his objectives though. Large firms use subcontracts to utilize excess plant capability and to develop into different product areas.

Small subcontractors however, are subcontractors by necessity in many cases. They are small, with limited resources, and, in many cases, have only one product or type of product which they can produce. The primary objective of these small subcontractors is to continue in business as well as make a profit.

E. GOVERNMENT PROGRAMS WHICH AFFECT SUBCONTRACTING

In order to have some impact in the area of subcontracts, the Government has several programs written into their acquisition regulations. Some of these programs include the Contractor Procurement System Review (CPSR), the right to consent to subcontracts, the Component Break-out Policy, and Small Business Subcontracting Policy. The following is a brief summary of these programs.

1. Contractor Procurement Systems Review

In 1952, the requirements for contractors to furnish detailed data on every subcontract or purchase order was causing excessive delays in the acquisition process. Recognizing this, the Headquarters, Air Material Command USAF developed the Procurement Systems Review. [26:355] The purpose of this review was to conduct a review of the contractor's procurement system in lieu of a review of individual purchases orders or subcontracts. This process evolved and was adopted for the entire Department of Defense when it was incorporated into the Armed Services Procurement Regulation in 1966. [26:356] In its present form, this program is called the Contractor Procurement System Review

(CPSR). The CPSR includes the evaluation of "purchasing of materials, services, subcontracting, and subcontract management, and in the case of major system acquisition programs...includes the management of the acquisition of material and services through purchase, from development of the requirement through completion of subcontract performance." [7:23-100]

The CPSR is required to be conducted on a contractor's procurement system when his negotiated sales to the Government both as a prime and a subcontractor are in excess of \$10,000,000 per year. The objectives of the review are to provide:

1. a means for evaluating the efficiency and effectiveness with which the contractor spends Government funds;
2. the basis for the administrative contracting officer (ACO) to grant, withhold, or withdraw approval of the contractor's procurement system;
3. reliable current information to the procuring contracting officer (PCO) on the contractor's procuring system for use in source selection, determining the appropriate type of contract, and establishing profit and fee objectives;
4. an independent review of the contractor's procurement system to optimize its effectiveness in complying with Government policy; and
5. current procurement system information for appropriate Department of Defense activities in areas of Government interest. [7:23-100]

A major part of the CPSR is the determination of whether the contractor competes his purchases and subcontracts to the maximum extent practicable. Items covered in this determination include whether:

1. a sufficient number of sources is solicited; and

2. subcontracting procedures provide other elements of adequate and effective price competition, including -

A. adequate descriptions of any factors to be evaluated, and

B. evaluation of all offers on a common basis. [7:23-103]

The CPSR is conducted by a Procurement Systems Analyst (PCA) who is normally assigned to the cognizant CAO. After the initial CPSR is conducted, the PSA makes a report to the ACO for the granting, continuing, withholding, or withdrawal of approval of the contractor's procurement system. After approval of a contractor's procurement system, the ACO is required to develop a surveillance system whereby he assures, with the assistance of the PSA and contract auditors, that the procurement system continues to warrant approval. The penalties which may result from an unapproved system include reduction profit rates, lower negotiated prices, and increased Government surveillance.

[7:23-108]

The Commission of Government Procurement Report of 1972, mentioned several areas concerning CPSRs which were reducing their effectiveness and recommended that they be corrected. These include:

1. Consolidation of the CPSR program under one central authority. There was a lack of uniformity in conducting CPSRs between DCAS, the Navy, and the Air Force. This tended to weaken the motivation for contractors to establish sound procurement systems by the fact that the Government did not have a firm and consistent policy.

2. Inclusion of special provisions in the contract by the negotiator tended to negate the relief from individual consent requirements.

3. Within DOD, due to manpower limitations, the program

did not fulfill its ASPR mandate of scope or coverage.

4. Significant benefits would be obtained from a formal training capability for PSAs within DOD. [26:389-391]

The CPSR program is a method by which the Government can keep a limited degree of control over a contractor's procurement system. Although the program is well structured there have been some deficiencies as reported by the Commission of Government Procurement.

2. Government Consent to Subcontracts

In certain instances, the Government finds it necessary to retain the right to consent to the prime contractor's proposed subcontracts. This may be because the item is critical and requires Government monitoring, the item may have a significant cost impact, or the item may impact on schedule. DAR lists the conditions under which consent is required. For Fixed-Price Contracts (except FFP and FPE) consent is required if the proposed subcontract is a cost reimbursement, time and materials, or labor hours contract estimated to be in excess of \$25,000; if the proposed subcontract will exceed \$100,000; or if the proposed subcontractor will receive in excess of \$100,000 in total subcontracts under the prime contract. [7:7-104.23] For Cost Reimbursement Contracts, consent is required for any proposed cost reimbursement, time and materials, or labor hours subcontract, for proposed fixed price subcontracts in excess of \$25,000 or five percent of the total estimated cost of the prime contract; and for any proposed subcontract requiring fabrication, purchase, rental, installation, or

other acquisition of special test equipment having a value in excess of \$1,000 or of any items of industrial facilities.

[7:7-203.8] Consent may also be required if the Contracting Officer decides to lower the threshold for closer surveillance of critical items. Consent may be deleted for items identified during negotiations except in major systems acquisitions. [7:23-201.1]

Consent to subcontracts is conducted by the cognizant contracting officer whether it be the PCO or ACO. Consent to a subcontract however does not constitute a determination of the subcontract cost or the allowability of costs. It does minimize the requirement for retroactive review of subcontracts, except cost reimbursement subcontracts, for the purpose of determining reasonableness of costs, unless there is some indication that costs may be unreasonable. [7:23-202]

In reviewing proposed subcontracts, the Contracting Officer is required to consider a wide range of areas. The areas are listed in DAR. [7:23-202] One of the areas considered is the basis for selecting the proposed subcontractor, including the price competition obtained. This factor could be used as a basis for not consenting to the subcontract.

The Government action in response to the use of a subcontractor which was not consented to would be in the determination of allowable costs and final contract price.

3. The Component Breakout Policy

The Component Breakout Policy is used in Government

acquisition as a means of providing specific equipments or items to prime contractors directly from the Government when it is to the Government's advantage to provide the items. The policy as listed in DAR is:

Whenever it is anticipated that the prime contract for a weapons system or other major end item will be awarded without adequate price competition, and the prime contractor is expected to acquire a component without such competition, it is the Department of Defense policy to break out that component if:

- i. substantial net cost savings will probably be achieved; and
- ii. such action will not jeopardize the quality, reliability, performance or timely delivery of the end item.

The desirability of breakout should also be considered (regardless of whether the prime contract or the component being purchased by the prime contractor is on the basis of price competition) whenever substantial net cost savings will result (A) from greater quantity purchases or (B) from such factors as improved logistics support through reduction in varieties of spare parts and economies in operations and training through standardization of design. Primary breakout consideration shall be given to those components of the end item representing the highest annual procurement costs and offering the largest potential net savings through breakout. [7:1-326.2]

Although the Component Breakout Policy does not directly affect the prime contractor's use of competition, it gives the Government an option to avoid having to depend on the prime contractor for items that the Government can obtain under better terms. Since prime contractors are given a management fee as part of the prime contract price, a reduction of subcontracts and thereby the management fee, reduces the prime contractor's profit.

4. Small Business

As previously mentioned, the Government uses the

acquisition process to implement many of its socio-economic programs. One of the largest programs which affects acquisition is the Small Business and Small Disadvantaged Business Program. A small business is defined as a concern which is independently owned and operated, is not dominant in the field of operation in which it is bidding on Government contracts, and, with its affiliates, can further qualify under the size criteria in DAR. [7:1-701.1] A small disadvantaged business concern is one which qualifies under the definition of a small business plus is at least 51 percentum owned by one or more socially and economically disadvantaged individuals. [7:7-203.74]

The policy concerning the use of Small Business and Small Disadvantaged Business Concerns is:

to enable small business concerns to be considered fairly as subcontractors to contractors performing work or rendering services as prime contractor or subcontractors under Government contracts, and to assure that prime contractors and subcontractors carry out this policy. [7:1-707.2]

In October 1978, Public Law 95-507 was enacted which implemented several changes to the Small Business subcontracting procedures in Government acquisition. Some of the requirements of this change include:

1. Establishment of an Office of Small and Disadvantaged Business Utilization in each Federal agency with procurement authority.
2. The requirement for contractors to submit subcontracting plans for all contracts in excess of \$500,000 to include percentage goals for the utilization of small and small disadvantaged firms.
3. The use of incentives by the Government to increase small and small disadvantaged concerns subcontracting opportunities.

4. Inclusion of the small disadvantaged business concern representation in all purchases other than small purchases. [7:1-707]

The Government controls the amount of small business participation through the requirement for the PCO to determine the adequacy of the contractor's subcontracting plan as a basis for award. This program is aimed at increasing the number of small businesses receiving Federal funds and thereby stimulating the economy. It is competitive by reason of increasing the number of possible sources.

F. SUMMARY

This chapter has described the background necessary for an understanding of the concept of competition at the subcontract level and the Government's requirement that it be used. Areas covered included the concern expressed regarding competition, the need for competition, objectives of the Government and industry, and Government programs affecting competition. The following chapter will describe the data collected in an attempt to analyze the state of competitive subcontracting currently achieved.

IV. GOVERNMENT SUBCONTRACTING

The purpose of this chapter is to present some of the answers to questions used during interviews and literature searches by the researcher as well as an analysis of these answers. Areas to be covered include the current nature of competitive Government procurement, competitive practices as used by the Government and industry, and problems encountered in attempting to compete subcontracts.

A. COMPETITION AT THE SUBCONTRACT LEVEL

In determining the nature of competition at the subcontract level, several different questions were asked of the interviewees. These included their definitions of competition, the kinds of items subcontracted for, subcontractor size, the degree of competition currently being achieved, and their perception of the need for competition. The following are summaries of their responses.

1. Competition Defined

When asked to characterize competition at the subcontract level, the first aspect cited by all of the interviewees was the definition of competition. Each interviewee had a different concept of what competition was. One prime contractor stated that his company considered a subcontract to be competitive if it received more than one response to a Request for Quotation (RFQ), regardless of any large differences in the quoted prices or divergence

from the proposed terms and conditions. Three other prime contractors interviewed stated that competition was obtained with the receipt of three or more bids with at least two qualifying as responsive.

All of the subcontractors interviewed stated that they felt themselves in a competitive environment for all transactions except those in which their company held a patent or could otherwise be considered a sole source.

A Government source at DCAS stated that the definition of competition as used in conducting CPSRs was that there be a minimum of three bids to any RFQ.

Although each company interviewed had a specific idea of what competition meant to them, there was found to be no generally accepted definition or criterion used in industry to define the concept of competition. The only clear cut definition of competition found in Government was the DAR definition of adequate price competition. [7:3-804.7] This lack of a general definition between the Government and industry makes measurement of the extent of competition industry-wide in subcontracting virtually impossible. Several interviewees indicated that the different standards used by the different actors in the acquisition process contribute significantly to the confusion and complicate the job of the Government Contracting Officer in making his decisions.

2. Types of Items Subcontracted

The amount of competition obtained in subcontracting is also highly dependent upon the types of items for which

subcontracts are awarded. For most raw materials and commonly used components, prices are normally close between sources and there are usually a large number of sources available. The type of competition sought by the prime contractors interviewed for such items centered primarily on delivery terms. The prime contractors stated that since price was normally fixed over a small range for these items, it was to their advantage to contract for the best delivery terms in order to decrease their risk.

Highly specialized parts such as pumps or valves that are patented, technologically complex items such as rocket engines or guidance systems, and items requiring large plant capacities such as airframes or ships hulls were identified by interviewees as more difficult to compete due to the limited number of sources with the capability to produce them. Competition for subcontracts with these sources is further reduced if their plants are in use or if they are competing directly against the prime contractor for the same contract. Interviewees stated that as a general rule, the amount of competition available for an item varies inversely with the degree of complexity, difficulty, or capital investment required for production of that item.

3. Subcontractor Size

The subcontractor himself will have different characteristics depending upon the situation. A common misconception is that subcontractors are always small with limited capacities. Although this is true in some cases, it is far from true in the majority of instances. It is very common

for a company the size of McDonnell-Douglas to be a subcontractor to another corporate giant, such as General Dynamics. This is especially true in the development of large expensive programs requiring huge capital investments and extensive technological development. Teaming agreements are used in some instances with one company taking the lead as the prime contractor and the other assuming the subcontractor role.

In any major system acquisition, a prime contractor may have a corporate giant as well as several smaller companies as subcontractors. Interviewees stated that with the increased Government emphasis on small and minority business involvement in Federal acquisitions, the number of these small subcontractors should be increasing.

As an example of the mixture of subcontractors, a study was recently conducted on four major defense systems acquisitions which included 18 subcontractors. Of the 18, seven conducted more business as subcontractors, and four felt that their business was evenly divided between prime contracts and subcontracts. [23;34]

It can be seen from these figures that a company can be a prime contractor for one contract, subcontractor for another, and prime contractor for the next. No company is permanently relegated to a specific role.

4. Amount of Subcontract Competition

Considering the differences in definitions of competition together with the various types of subcontracted items and the sizes of the firms, there were some very

interesting statistics given by the interviewees as to the extent of subcontract competition currently being achieved. Since most companies interviewed did not separate their statistics between production and development subcontracts, the statistics quoted will be a combination of both types of procurement.

One prime contractor in the aerospace industry stated that in 1977, 60% of his company's subcontracts were competitive and that in 1978 this figure increased to 76%. His figures for the number of sole sources were unavailable because they were lumped together with single sources and directed subcontracts. Another aerospace firm claimed that 95% of all of its subcontracts were competitive and that 90% of its total subcontracted dollars were competitive. It claimed an upward trend in competition. All four major prime contractors interviewed estimated that at least 60% of their subcontracts were competitive and that they were improving that figure yearly.

Subcontractors interviewed varied in the amount of their sales which were competitive from 20% to 95% and could give no substantial estimates on the overall amount of competitive subcontracting in their industries.

Perhaps the most significant figures on the amount of competitive subcontracting were those supplied by DCAS based on the results of CPSRs from companies meeting CPSR threshold requirements. The amount of competition in subcontracts over \$10,000 in 1978 was 42% of orders and 37% of dollars spent. Both figures have been steadily declining

since 1971 when 52% of orders and 48% of dollars spent were competitive. DCAS attributed this decline to the changing mixture of contractors, a decline in the total number of contracts, and the desire to keep certain contractors in business in order to maintain an industrial base.

As can be seen by these figures, there is a considerable difference in the amount of competitive subcontracting perceived by industry and the figures obtained by the Government. This difference is accentuated by the lack of a common definition of competition, the product mixes of the industries interviewed, and the limited sources available to the Government, primarily only CPSR qualified firms.

5. The Need for Competition

Industry and Government also differ in their opinions as to whether there is sufficient competition already in subcontracting. Interviewees were asked if they perceived a need to increase the amount of competitive subcontracting.

Congress perennially brings up the need for more competitive subcontracting. As Senator Proxmire stated before the Joint Economic Committee in 1972 "...subcontracting competition is being avoided." [2:145] OFPP and DCAS interviewees stated that the need for competitive subcontracting as called for by the Congress stems from a lack of complete statistics as to the extent of subcontracting. There is no centralized or standardized reporting procedure for prime contractors to report on the amount and type of competition achieved in subcontracting. The only

measurements taken are of the extent of small business participation, competition as measured in CPSRs conducted by DCAS, the Navy, and Air Force (limited to prime contractors conducting over \$10,000,000 in Government contracts per year), and figures held by individual project offices. There are no data bases available to measure the amount of all subcontracts awarded competitively.

Prime contractors interviewed felt that there was sufficient competition available and being achieved by their companies. One aerospace contractor stated that there were always 6-7 responses to each RFQ. All prime contractors interviewed felt that the Government should not take steps to try to increase the amount of competition due to the potential increases in contract prices and time required to accomplish any new requirements.

The subcontractors interviewed also felt that there was sufficient competition. They expressed the fear that if the Government were to push for an increase in competition then they may lose some of their bargaining power with prime contractors due to the increase of options. The subcontractors interviewed did not want an increase in competition for items they were already producing, they preferred to be sole source or one of a very few sources in order to ensure a market.

Thus it can be seen that there is no agreement on the sufficiency of competition at this time. The Government lacks data, prime contractors are content and want no more Government interference, and subcontractors are not

all in favor of competition due to its effect on their market.

6. Summary

The nature of competition at the subcontract level varies from contract to contract as can be deduced from the preceding section. Factors which affect the nature of competition in subcontracting include the various definitions of competition, the types and sizes of firms, the cost and complexity of the requirement, and the desire of the interested parties to achieve competition.

B. COMPETITIVE PRACTICES

The degree of competition obtained in a subcontract is dependent on the actions taken by all three parties involved: the Government, prime contractor, and subcontractor. Each of these actors affects the amount of competition through its policies and procedures. The following paragraphs describe some of the areas where each actor influences the amount of competition.

1. Prime Contractors

When asked how they were achieving competition at the subcontract level, prime contractors described their efforts in three major areas; source selection, contract type, and source development. The following is a summary of their efforts.

a. Source selection

The prime contractors interviewed stated that after the decision to buy an item is made, the specifications

for the Request for Quotation (RFQ) were developed in the prime contractor's engineering departments based on the prime contract specifications, the material known to be available on the market, and the estimated capabilities of known suppliers. In some cases, especially in new development contracts or in technical areas in which the prime contractor has little or no expertise, potential subcontractors are queried for input to the proposed specifications. Dependence on subcontractors for specifications gives these subcontractors an advantage in competing for the proposed subcontract; they have a head start on proposal preparation and, since they helped provide the specifications, they potentially have a technical advantage. Prime contractors stated that this practice was not desirable because it put the potential subcontractor into a very strong bargaining position and tended to make the prime contractor dependent on him, but that in some cases it was necessary to fulfill prime contract requirements. In cases calling for off-the-shelf items the specification preparers weigh the known cost and quality of these items against the estimated costs and quality of specially manufactured items. All prime contractors interviewed preferred to use commercial items, if available, due to the decreased risk in production, schedule, and unknown costs. It was felt by the prime contractors that competing these items would not increase quality or reduce cost because the items had already been tested, marketed, and proved reliable.

After the RFQs have been prepared, they are

submitted to potential sources as identified by the prime contractor's bidders lists. These lists identify all potential sources by name and by capability. Inputs to these lists come from unsolicited proposals, advertising, past experience, reputation, evaluations prime contractor personnel, professional journal articles, and in some cases, from recommendations by Government contracting personnel. All prime contractors interviewed stated that they had excellent industry coverage in their bidders lists as evidenced by their success in receiving a large number of bids on most RFQs. The prime contractor stated that the only area of their bidders lists which was incomplete was in the identification of small disadvantaged businesses which are being promoted by the Government's small business policies.

After development of the bidders lists, most of the prime contractors used a source selection board to assign evaluation weights to the various sections of the RFQ. This board was normally headed by the director of subcontracts and included representatives from the engineering, quality assurance, and manufacturing departments. In most cases, this board also reviewed the potential sources on the bidders lists and either selected the sources to be solicited or prepared letters of interest to determine which sources would be interested in responding. Assignment of the evaluation factors prior to sending out the RFQ was considered to be a sound competitive practice by all of the interviewees. Most of the prime contractors

interviewed included the evaluation weights in their RFQs. One major aerospace subcontract manager stated that his company did not include these weights because the form considered them as being extraneous information and that bidding firms could be better evaluated if they were unaware of the weighting and judged only on their perception of the requirement. Other prime contractors considered inclusion of these weights as a factor which could contribute to competition as well as foster better bids. Inclusion of the weights could prevent a competitive advantage by a firm which has had prior business with the prime contractor and is accustomed to the prime's evaluation criteria over another firm which has had little or no experience with the prime.

All of the major prime contractors made use of bidders conferences for major purchases during which they clarified any areas of confusion for all potential sources. These conferences were primarily held for large or complex developmental or systems subcontracts. The primary goal of these conferences was to ensure that all of the bidders were bidding for exactly the same items and secondarily, to ensure that all of the bidders had exactly the same information.

The procedures for evaluating proposals was found to be standard throughout the prime contractors interviewed. After proposals were received they were broken down into areas of expertise and forwarded to the members of the source evaluation committee. This committee normally consisted of the principle engineer involved, the material

manager, manufacturing experts, financial auditors, and the subcontract manager (in some cases this evaluation team was the same as the source selection board). Each member saw only the proposal sections in his area of expertise and received all of the proposals at the same time. After evaluation was completed, the results were forwarded to the source selection board for determination of award. Depending on the size and importance of the subcontract, final approval was sometimes required at the highest levels of some firms.

The primary areas evaluated in the source selection process were: 1) technical approach; 2) cost; 3) past experience; 4) manufacturing capability; 5) schedule; and 6) management. The weighting varied depending on the material required and the conditions of the prime contract, but generally, prime contractors insisted that the technical approach was the primary criterion.

Source selection procedures as outlined above were found to be standard throughout the prime contractors interviewed with the exception of inclusion of evaluation weighting factors in the RFQ. All of the prime contractors interviewed were CPSR approved. This review process did not surface any problems with the prime contractors' source selection systems.

b. Contract Type

In the area of contract type, the prime contractor attempts to put himself into the optimum risk position relative to the subcontractor. If he can, the prime

contractor will attempt to force the subcontractor to assume the risks of cost overruns, schedules, and deliveries in order to minimize the prime contractor's potential for failing on the prime contract. The type of contract used by the prime contractor determines much of the risk sharing and can scare away some potential bidders.

When questioned about what types of contracts were used in their subcontracts, the prime contractors' responses varied with the type of acquisition and who the subcontractor was. Cost-type contracts were primarily used for highly technical or developmental procurements where the risk of failure was high. Fixed-price contracts were used on smaller developmental and almost all production procurements. The size of the subcontractor also played a large role in the type of subcontract. Subcontracts between large companies were found to be more flexible primarily due to the large subcontractor's bargaining position. A General Dynamics program subcontracted to Hughes Aircraft utilized a cost-type subcontract because Hughes would not accept a more inflexible type and was the only firm available with the capacity to produce the requirement. Small subcontractors, on the other hand, were normally found to be forced to accept more inflexible contracts due to their dependence on the large primes for a market and the number of competitors at that level. All of the prime contractors interviewed stated that they preferred to use Firm-Fixed-Price contracts since they afforded the prime more control and less risk.

Concern over the affect of contract type on competition was varied. One prime contractor stated that the subcontractors could "take it or leave it" because his firm could always find another source. Another prime contractor stated that if his subcontractors ran into difficulties due to the type of contract they were forced to accept, his firm would probably be "glad to buy them up" and finish the contract with the former subcontractor as a subsidiary. Another prime contractor stated that his company tried to be as equitable as possible in risk sharing by being flexible on contract type in negotiations. This company realized that non-performance by the subcontractor due to contract type (forcing them out of business) would not help the prime contractor to fulfill his prime contract terms.

All of the prime contractors were concerned over their right to data developed by a subcontractor in the performance of the subcontract. As a flow down from the Government prime contract, all of the prime contractors used a data rights clause in their development contracts. The clause claimed the prime contractor's and/or the Government's right to any data developed by the subcontractor. The primary purpose of the clause was to prevent the subcontractor from becoming a sole-source and to provide a data package to enable other sources to competitively bid on follow-on contracts. Although the prime contractors agreed that the data rights clause was extremely useful they all agreed that if the Government did not claim and

pay for data rights in its prime contract then the prime contractor certainly would not - because the extra cost to the prime contractor would not be guaranteed reimburseable.

It has been shown that prime contractors prefer to use the type of contract which reduces their risk the most. Some prime contractors attempt to be equitable in their negotiations with subcontractors while others depend on the competitive nature of subcontracting to enable them to use inflexible subcontracts. Data rights are considered by all prime contractors to be important but they are not willing to pay for them without a guaranteed reimbursement.

c. Source Development

It is important that prime contractors be able to identify or develop new sources in order to reduce the number of sole-source subcontracts and to increase their options in awarding and developing new products. Different prime contractors have opposite views on how to increase their sources. Some are active and others inactive. Most of the prime contractors interviewed depended upon established bidders lists and engineering appraisals of existing sources.

A subcontract manager at one aerospace firm stated that if the Government did not specifically supply funds to develop sources then his firm would do nothing. The firm required a contract to include specific direction and funding for new source development.

Only one major firm was found which had an active and positive source development program. The company's

executives were given performance evaluations based on a management by objectives concept. One of the primary areas covered in the evaluation was source development. It was company policy that all departments would actively seek out new potential sources to increase the company's selection base and allow the company to become potentially more competitive for prime contracts through an increase of options. The company provided limited funding and technical support to new sources, especially if they had the potential and desire to compete against sole-sources. One method employed by this prime contractor was to identify a source with the capability or potential to bid against a sole-source, and to encourage that source to develop its own specifications and to compete. This program had two potential results: 1) the original sole-source would reduce its price in the face of competition; and 2) the new source could underbid the original source and win the contract. In one case cited by the prime contractor, the prime contractor realized a reduction of 20-50% in subcontract costs, a faster schedule, and a marked increase in quality from the other competing subcontractors.

All of the prime contractors interviewed have initiated programs to identify potential sources in the small and economically disadvantaged business areas as a result of the requirement of P.L. 95-507 to establish goals for the use of these sources. These programs currently consist of reviews of existing bidders lists and industry searches for new sources. Prime contractors stated that

their initial emphasis is on the quantity rather than the quality of these firms that they can identify and use.

2. Subcontractors

The subcontractors interviewed stated that their efforts to increase their competitive positions were primarily in the areas of marketing and new production development. Efforts in these areas were dependent largely upon the size of the firm and how much of its business was dedicated to subcontracts.

a. Marketing

The amount of marketing devoted to subcontracts varied according to the size of the firm and its product mix. Large subcontractors stated that their size and diverse capabilities enabled them to be competitive on a large range of items. Their research and development and marketing efforts were primarily concentrated in the prime contract area, but they did a reasonable amount of these functions to keep their plants in operation in case of a shortage of prime contracts.

Small subcontractors interviewed stated that they were highly dependent on advertising, anticipating demand, and new ideas in order to beat their competition and win contracts. Their marketing efforts covered areas such as; published advertisements in journals and magazines; new product descriptions submitted to potential contractors; good informal relations with prime contractor personnel; and, unsolicited proposals. In order to anticipate demand, the small contractors kept abreast of current or planned

programs through the Commerce Business Daily, the Wall Street Journal, discussions with prime contractors, and discussions with Government engineers.

b. New Products

Subcontractors are highly dependent on either the products that they have exclusive rights to or new products which have few or only one producer. Most small subcontractors felt that they were not "competitive" if they were not a sole source or one of a very few sources for an item. This position was their only guarantee of obtaining subcontracts and being able to remain in business. It was found that many of the small subcontractors were started as a result of a single new idea or product and were dependent upon that item or a new one to remain in existence. For this reason, many of the small firms are dedicated to new product development and remaining sole-source. Competition to them would mean a significant decrease in income resulting in a decrease in the amount of funding for new research. For this reason, most small firms did everything in their power to maintain sole-source status including retention of data rights, the use of patents, and dedicating large percentages of their funds to new product development.

Thus small subcontractors increase their competitive position through advertising and research and development. The "competitive" position sought by the small subcontractor is that of the sole-source in order to guarantee his continued existence. It would not be logical

to expect to incentivize these small subcontractors to diversify thereby putting themselves into weaker bargaining positions with prime contractors and eliminating their guaranteed markets.

3. The Government

Although the Government has no privity of contract with the subcontractor and relies on the prime contractor to make and administer subcontracts, it does take several steps to encourage the prime contractor to compete his subcontracts. The Government does this to increase the potential for cost savings and increased quality. Some of the steps taken by the Government to promote competition include: CPSR; Government consent to subcontracts; the requirement for small business participation in Government subcontracts; the use of second sourcing; Government Furnished Equipment; contract clauses; and, contract types. The following paragraphs describe these steps.

a. CPSR

One of the primary methods of ensuring that a prime contractor is adequately competing his subcontracts is through the use of the CPSR. The DAR directs that in reviewing a contractor's procurement system a determination shall be made "as to whether subcontracting is done competitively to the maximum practicable extent." [7:23-103.b] This determination requires therefore, ascertaining whether:

- (i) a sufficient number of sources is solicited; and
- (ii) subcontracting procedures provide other elements of adequate and effective price competition, including

(A) adequate descriptions of any factors to be evaluated, and

(B) evaluation of all offers on a common basis.

[7:23-103b]

As an example of the criteria used for determining adequate price competition, the factors considered by DCAS during a CPSR are contained in Appendix D.

The procedures and steps of the CPSR program are contained in Chapter III.

b. Government Consent to Subcontracts

The Government also ensures that the prime contractor is competing his subcontracts through the use of the requirement for Government consent to subcontracts as described in Chapter III. The clauses for fixed-price contracts and cost-type contracts differ from each other and are contained in Appendix B. It should be reemphasized that despite the threshold limitations in DAR, contracts requiring extraordinary Government surveillance may be subject to these clauses.

c. Small Business Requirements

The enactment of P.L. 95-507 which established a new small business and small disadvantaged business subcontracting program is another Government action which is intended to increase competition. It requires the apparent successful offeror or low bidder for construction contracts exceeding \$1,000,000 and all other contracts exceeding \$500,000 to submit subcontracting plans for the utilization of small businesses and small businesses owned and controlled by socially and economically disadvantaged

individuals. Subcontracting plans will include percentage goals for using such firms and these goals will be used in the final determination of award. Any failure of the contractor to comply with these subcontracting plans will be considered a material breach of contract. [3:3] The Government expects this program to increase the number of small subcontractors receiving funds from Government contracts.

d. Second Sourcing

One method that the Government uses to preclude the development of sole-source subcontractors is to require that the prime contractor have at least two sources for critical items. This accomplishes two things. It eliminates the sole-source with the potential for driving up contract price and ensures a second source of critical items in case one firm fails or there is a national emergency. This second sourcing is normally required for items affecting the strategic forces or systems of the military. In many cases this method is accomplished by utilizing technical data packages developed in the original contract and competed in follow-on contracts.

e. Government Furnished Equipment

Another indirect method that the Government uses to increase competition at the subcontract level is through the use of Government Furnished Equipment (GFE). This is essentially a method by which the Government contracts directly with current subcontractors thus becoming prime contractors. The prime contractor is allowed a degree

of profit for his subcontract management efforts. If the items are furnished GFE then the prime contractor loses this profit. Two methods used by the Government to provide GFE include the Component Breakout Policy and direct licensing.

Component breakout is a method for generating production competition for procurement of components or subsystems. The Government screens a major contractor's make-or-buy plan for high cost items. If any of these items are being purchased on a non-competitive basis the Government may consider competing them itself and providing them to the prime contractor as GFE.

Although the Government has no privity of contract with the subcontractor, it may approach the subcontractor in an attempt to achieve a direct licensing agreement. This agreement would, in fact, be a prime contract for the firm to provide data and expertise to another firm of the Government's choice in order to develop the other firm into a source for the item. Because the subcontractor usually demands a very high fee for this service and because it would increase the number of competitors he must deal with, this is not a common practice.

f. Subcontract Clauses

DAR requires the following clauses in all negotiated contracts over \$10,000, except in Firm-Fixed-Price contracts where award is on the basis of effective price competition or where prices are established by law or regulation:

COMPETITION IN SUBCONTRACTING

The contractor shall select subcontractors (including suppliers) on the competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract. [7:7-104.40]

Although this clause is required, it leaves the option to compete up to the prime contractor and basically states the Government's preference for competition.

Other subcontract clauses required specifically by DAR are the requirements for Government consent to subcontracts for fixed-price and cost type contracts. [7:7-104.23, 7-203.8]

g. Contract Type

The use of award-fee contracts is another method currently being employed by the Government to achieve competition. The Joint Cruise Missile Program is using Cost-Plus-Award-Fee (CPAF) contracts with the award fee based in part on the degree and extent of competition obtained by the prime contractor. The prime contractors in turn have used CPAF subcontracts with their major subcontractors. The PCO felt that this type of contract gave the prime contractor significant incentive to compete his subcontracts and the first tier subcontractors significant incentive to compete their subcontracts.

This project office also used two other methods to ensure competitive subcontracting. First, the contracting personnel sat in on the prime contractor's bidder's conferences and award conferences, and, although having no legal position, felt that they influenced the prime

contractor's decisions through their presence and awareness of his alternatives. Secondly, the PCO retained some contract administration duties in the project office instead of delegating them to an ACO. He retained the right to consent to subcontracts for major subcontracts feeling that the Contract Administration Organization may not give them sufficient attention. This gave the PCO more confidence in the prime contractor's subcontracting efforts and encouraged the prime contractor not to take any shortcuts since he would be dealing with the project office and not a separate organization.

4. Summary

It has been shown how the different actors in the contracting cycle affect the amount of competition in subcontracting. The prime contractors have an influence through their source selection policies, contract types, and source development programs; the subcontractors influence competition through their marketing policies and their product mix; and the Government influences competition through the CPSR, consent to subcontracts, small business policies, second sourcing, GFE, contract clauses, and contract types.

C. PROBLEMS IN COMPETITIVE SUBCONTRACTING

There are several problem areas consistently encountered in the attempt to achieve competitive subcontracting. These problems are encountered by all three parties involved: Government, prime contractors, and subcontractors. The

purpose of this section is to present some of these problems as identified by the interviewees.

1. Prime Contractor Problems

The prime contractors interviewed stated that they faced problems in achieving competitive subcontracting in three areas. These areas included finding competent subcontractors, evaluating "buy-ins", and Government use of inflexible contracts. The following is a summary of their comments.

a. Subcontractor Identification

Prime contractors claimed that they could not always find enough sources willing to compete for Government subcontracts. Some firms, whose business was primarily with the commercial sector, did not want to comply with Government requirements such as cost accounting standards and reporting requirements which were substantially different than their established procedures. They resented what they felt was undue Government monitoring of their businesses. Prime contractors felt that there was little that they could do to induce these firms into the Government market.

In some areas, such as high technology and complex systems, prime contractors stated that there was very little entry of new business into the industry. This was due to the high initial investment requirements, the number of established firms already in the industry, and the relatively small number of contracts available. They felt that this also limited the competitive options.

Prime contractors were generally unwilling to invest in potential sources without a guaranteed return. The only program in use by the Government to provide investment opportunities was in the small business area where loans may be underwritten by the Small Business Administration. These guarantees were made only after contract award. This post award guarantee was of little help in the prime contractors' source evaluation process.

b. Buy-ins

Another problem that prime contractors faced in obtaining competition was the "buy-in." The prime contractor has to be able to identify sources who are deliberately underbidding in order to win a contract. Evaluation of proposals and sources is a high cost, time consuming procedure, but if not properly done, may result in default of the subcontractor and thereby problems for the prime contractor. Prime contractors stated that in many cases, proposals were received on the borderline between buy-in and a reasonable bid. Prime contractors readily accepted the buy-in from firms which had a good financial base but were hesitant to accept these bids from firms with marginal finances.

c. Prime Contracts

The increasing emphasis on fixed-price contracts by the Government also was found to contribute to the lack of competition by the prime contractors. The prime contractors stated that the lack of flexibility inherent in fixed-price contracts limited their subcontract options and

in some cases, reduced the number of available sources. One prime contractor cited a case where the prime contract required him to procure a small number (five) of complex items which had been previously produced. The Government would not consent to the use of a cost-type subcontract since these items had been produced on three separate contracts. The subcontractor considered the items to be high risk production items and subsequently bid very high on a fixed-price basis to cover the risk. Since the items were essential, the subcontract was accepted at the high price. The prime contractor estimated that the use of a cost-type contract would have saved the Government 30-50% on these items. Prime contractors felt that although the use of fixed-price contracts fixed the amount of funds to be spent, they could, in cases of complexity and limited sources, drive up the total contract price.

2. Subcontractor Problems

Subcontractors interviewed stated that most of their problems in being competitive stemmed from the prime contractors. All of the subcontractors interviewed contended that if they maintained themselves in a competitive position, able to compete with other firms, they would be at the mercy of the prime contractors. If the prime contractor could not achieve the terms that he desired from a specific subcontractor, then he would go to other subcontractors until he found one which would accept his terms. This inferior position encouraged subcontractors to become sole-sources in order to have a bargaining position in contract

negotiations.

Subcontractors agreed with the prime contractors that there was a lack of capital available to help them to increase their capabilities. They also stated that Government regulations made business with the Government undesirable if a good commercial market were available.

One subcontractor cited a case of prejudiced proposal evaluation by a prime contractor. The prime contractor was a division of a major corporation. The RFQ was submitted to eight sources including another division of the corporation which needed the work. The subcontract was awarded to the other division due to "superior technical approach and manufacturing capability." The losing subcontractor had previously produced the item with no problems, had the capability available, and underbid the winning source. This subcontractor felt that the large corporations considered much more than the best bid in their awards and were not always proponents of competition.

3. Government Problems

The Government is also faced with a number of problems in its policy to promote competitive subcontracting. These problems stem from the inadequacies of existing procedures and the lack of resources to do an extensive job. The following problems were identified during research and include: the lack of adequate subcontracting data, inefficiencies in CPSR, problems in consenting to subcontracts, technical data packages, the effect of small business policies, and the requirement for standardization.

a. Subcontracting Data

Interviews conducted at various levels of DOD exposed an apparent lack of concern over competition in Government subcontracts. This was due in part to a lack of data on the extent of subcontracting and the amount of current subcontracts awarded competitively. Interviewees at all levels, e.g., OFPP, DOD, Navy and Air Force Systems Commands, Project Offices; and local purchasing activities, were highly confident in the relied on contract administration functions, such as CPSR and ACO consent procedures, to ensure competitive subcontracting. Except for the DAR and some Air Force Systems Command publications, there was a lack of written procedures and policies throughout the sponsoring commands to ensure that competition was being achieved and to monitor its extent. As an example, the Navy Material Command (NMC) does not give specific direction to its subordinate activities concerning procedures or goals in competitive subcontracting. The Naval Supply Systems Command also has no specific written guidance for its Supply Centers or Regional Procurement Offices. The emphasis in all of these organizations was on competitive prime contracts and reliance on the CPSR and ACO consent.

b. CPSR

Although the CPSR concept is valid and useful in some cases, its implementation has several deficiencies. First of all, for a prime contractor to qualify for a CPSR, its negotiated sales to the Government, including prime contracts and subcontracts under Government prime contracts

and including modifications to competitively awarded contracts, should be expected to exceed \$10,000,000 during a twelve month period. [7:23-101] CPSRs are not required by DAR for specific contracts even if they exceed this threshold. This threshold limits the number of firms to largely major corporations and gives no consideration to any prime contractors beneath the threshold. These other contractors constitute a large percentage of Government procurement dollars and may need to be monitored. The threshold had been \$5,000,000 until recently when it was raised in order to compensate for inflation and reduced manpower in the contract administration organizations. There has been controversy over this increase within the Federal Government. The DAR subcommittee on CPSR recommended that the threshold be maintained at \$5,000,000 or even lowered since most of the significant savings of the program appeared to be realized in the lower range. The Defense Logistics Agency and DOD fought for the higher threshold and won.

Another problem in relying on the CPSR by contracting officers is the amount of time and manpower required to properly perform a CPSR. DCAS policy at this time is to send a team of two persons to spend a total of only two weeks at a prime contractor's plant to conduct the review. The DOD Manual For Contractor Procurement Systems Review contains seventy major areas of the contractor's purchasing system required to be reviewed. Sources at DCAS acknowledge that there was no possible way for a

team of two to cover these areas in any detail in the time allowed. The Air Force uses a four-five man team for three-four weeks and the Navy varies significantly in its resources for CPSR reviews from plant to plant.

A third element reducing the efficiency of the CPSR is the personnel conducting the review. First of all, there is no formal training program conducted. All training is strictly on the job, leaving room for significant variance in inspection standards. What one auditor may consider competition another may not. There is also the problem of regionalism. The same inspectors may cover a firm time after time with no input of new ideas. There is no cross-training between regions. The low rating of inspectors (GS-11, GS-12) is another negative factor since they are auditing a contractor's organization where the average person they interface with earns 2-3 times their salary. Many prime contractors stated that they felt that these Government personnel were not always qualified to tell them how to run their business.

c. Consent to Subcontracts

Government consent to subcontracts was another area presenting significant problems. Six current or former ACOs were interviewed and stated that due to manpower, time, and the large number of contracts under their cognizance, their consents were primarily rubber stamps. The only areas even checked by two ACOs were if the proposed subcontractor had a good business rating in Standard and Poor. None of the ACOs interviewed had ever been involved in

withholding consent for any subcontract.

The "rubber stamp" experience was alluded to by several of the prime contractors interviewed. Due to this perception, it was found that in many cases the prime contractor proceeded with the proposed subcontract and obtained Government consent after the fact. Prime contractors justified this by citing the long delays which would result if they waited for each consent action and the apparent lack of concern by the Government personnel who rubber stamped the proposals anyway.

In the contracting offices visited contracting officers did not trust the ACOs to do a good job in making the determination to consent to subcontracts in all cases, recognizing that the ACO was burdened by a large number of contracts and that he could not give special attention to each. To counter this, most major project offices keep as much consent responsibility in their own offices as possible and, when the load is too large, keep only the larger and most critical subcontracts in-house.

d. Technical Data Packages

Another area that presents problems is in the data packages supplied by subcontractors. A subcontractor might not choose to agree to supply a data package if he is in competition with the prime contractor on similar work. He also may not want to submit the data package if he feels that the prime contractor may use it to compete against him in a follow-on contract. Several large corporations were cited by one PCO as having used the data

package supplied by the subcontractor to compete against that subcontractor. One firm specifically changed its make-or-buy plan in additional prime contracts to fabricate an item which it had previously subcontracted and gained the data rights for. This type of action discourages subcontractors from providing adequate, if any, data and encourages the development of sole sources.

Data packages themselves are not always sufficient or complete enough to use to achieve competition. In many cases, manufacturing techniques vary as well as interpretation of specifications. Two firms can build from the same specifications and get two completely different products. Some subcontractors have been known to leave critical gaps in their data packages in an attempt to maintain a competitive edge.

e. Small Business

The changes in the mandatory small business laws are presenting some new problems in competitive subcontracting. First, prime contractors feel that there is an excessive burden on them to identify small and minority business concerns before contract award. The search effort is costly and time consuming especially if the contract is not guaranteed. Secondly, they are skeptical about the requirement for goals, particularly the basis upon which they will be determined and the qualifications of the Government personnel involved in setting them. Prime contractors interviewed agreed that this program will have significant impact on the cost of prime contracts.

Government contracting personnel interviewed stated that the new small business requirements would increase contract costs and probably slow down the procurement cycle. They cited the longer time required to identify sources and the increased administrative burden of conducting this program as the causes.

A recent GAO study on the mandatory small business subcontracting policy identified the following problems:

- the lack of a clear and consistent definition for the term "subcontract" in solicitations and contracts;
- the difficulties with using incentives to increase small business subcontracting
- the refusal and potential refusal of normal suppliers to bid on procurements for commercial items; and
- the procuring activities lack of adequate data and methodology to prepare goals for inclusion in solicitations which would increase small business subcontracting. [3:2]

Although the DAR has recently been changed to include this new policy, it has not addressed these specific problems. The current DAR policy is included in Appendix D.

What the above problems do to the competitive intent of this policy are (1) confuse the definition of subcontract leaving an opening for prime contractors to avoid the rules, (2) cause mistrust and confusion on the part of both prime contractors and subcontractors, and (3) allow room for confusion and error in the preparation and evaluation of goals. This policy could deter both prime contractors and subcontractors from entering into contracts with the Government according to several

Government contracting personnel interviewed.

f. Standardization

Another area which presents a problem in competing subcontracts is the Government's policy for standardization in the military. Standardization is desired in order to allow greater flexibility and interchangeability between military equipments and systems. Parts from one tank should be able to be used to fix another tank. This allows a more efficient system of repair parts and allows purchases on a scale where cost savings may be realized. Competing subcontracts, especially for follow-on contracts, provides the means for more than one manufacturer to supply a specific part. Even using the same specifications, these parts may not be compatible or interchangeable. The desire for competition must, therefor, be weighed against the desire for standardization.

An example of an approach used to eliminate this problem in the Navy shipbuilding program is that used for the FFG-7 class ships. According to the PCO, traditionally major equipments subcontracted within the same ship class could come from different subcontractors and be potentially incompatable. This was due to competing the contracts as each new group of ships was authorized. In an attempt to maintain competition in the initial stages and maintain standardization throughout production, the FFG-7 program has used a concept of standardized option equipment. In the original RFP, forty-two pieces of equipment were identified to be contractor furnished equipment

required to be identical. The contractor then negotiated with the potential subcontractors on the basis of an option for forty of each of the items. The contract was awarded to Bath Iron Works (BIW). Another prime contract was awarded to Todd Shipyards but they were directed to use the same subcontractors at the prices and terms quoted to BIW. To date there have been no problems with the subcontractors and the project office is considering extending the option for more ships.

4. Summary

It has been shown that there are many problems to be faced by all of the actors in the acquisition process in the attempt to achieve competitive subcontracting. The prime contractor faces Government requirements, inadequate sources, and potential buy-ins. The subcontractor faces the difficulty of Government requirements, prime contractor pressures, and the pressure to ensure a market. The Government faces the problems of fine tuning its own programs, staffing its activities, and encouraging the prime contractors and subcontractors to compete.

D. CHAPTER SUMMARY

This chapter has described the nature of competition at the subcontract level, the programs and procedures used by prime contractors, subcontractors, and the Government to achieve competitive subcontracting, and the problems encountered by each. The following chapter will identify conclusions and recommendations derived from the preceding information.

V. CONCLUSIONS/RECOMMENDATIONS

A. CONCLUSIONS

1. The extent of competitive subcontracting is unknown. It is impossible to determine the extent of competitive subcontracting from the information currently available from the Government and industry. There is no required reporting system in use by the Government to monitor where and on what basis subcontracts are awarded. There is confusion and disagreement between the definitions of competition as used by Government and industry causing even the few statistics available to be unuseable. Government programs such as CPSR and consent to subcontracts are also unreliable sources of general subcontracting data since they do not extend to all subcontracts and have serious manning and implementation problems. Although most of the prime contractors' purchasing practices have been shown to be competitive, it has also been shown that in some cases non-competitive practices were either used or had the potential to be used. It cannot be assumed therefore, that competition is always used.

2. There exist a number of pressures in the procurement cycle against the increases of competitive subcontracting. Prime contractors feel that there already exists sufficient competition in their subcontracts and that any more Government interferences or direction could result in higher prices and slower deliveries. Prime contractors also point out that increased emphasis on competition increases the

possibility of buy-ins and subcontract failures.

Subcontractors are not always willing to support the need for competitive subcontracting. Many subcontractors are not willing to perform or bid on Government subcontracts due to the added requirements that the Government imposes. They prefer to deal with the commercial market if available. Most subcontractors also prefer the role of a sole-source to ensure a market for their products and to achieve a better bargaining position with prime contractors. The more sources available for an item the less chance that a particular subcontractor will be able to win a particular subcontract.

Although the Government policy is for the use of competition in subcontracting, there is also a desire for standardization in most military systems. While this in itself is not counter-competitive, if the parts of a system were competed each time a new order was authorized there would probably result a decrease in standardization.

3. The Government can both directly and indirectly influence the amount of competitive subcontracting. The Government is able to influence the amount of competitive subcontracting through contract types, contract clauses, and contract administration. The use of flexible contracts such as cost-type contracts, allows the prime contractor more flexibility in attracting potential sources. Contract clauses requiring the prime contractor to compete his purchases are used. The requirements for CPSR and Government consent to subcontracts are methods by which the Government

can monitor the prime contractor's compliance with competitive policies. The Government can use award-fee type contracts and base the award fee partially on the amount of competition achieved by the prime contractor. The determination of final contract price can be influenced by the Government depending upon the prime contractor's performance of clause requirements relating to competition. Thus it can be seen that the Government influences competitive subcontracting through the terms of the original contract and through the process of administering that contract and determining price.

4. Although the Government's monitoring systems and objectives are sound, they do not always ensure competition. Although DAR clauses direct that subcontracts be awarded on a competitive basis, most Government contracting personnel depend on the CPSR and the Government's right to consent to subcontracts as the primary means to monitor the prime contractor's compliance with these clauses. It has been shown that CPSRs are deficient in the number of firms covered, the high threshold to qualify for a review, the lack of properly trained personnel to conduct them, and the variances in the inspection between cognizant performing activities. The policy of Government consent to subcontracts has also been shown to be inadequate due to the large number of contracts monitored by each ACO, the lack of personnel and time at the CAOs, the separation between the PCO and the ACO, and the prime contractor's desire to proceed with subcontracts prior to consent. The deficiencies in these

programs allow significant room for non-competitive practices.

5. The need to increase competitive subcontracting is not apparent. Although the Government's policy is to use competition as the primary means of source selection, the need to increase the current amount of competition at the subcontract level is not apparent. Until the extent of competitive subcontracting is determined, it would be illogical to require that it be increased. Most concern expressed by Government officials about the need to increase competitive Government subcontracting stems from the lack of subcontracting data available to Government policy makers and could prove to be unnecessary if it were determined that sufficient competition was being achieved by the prime contractors.

B. RECOMMENDATIONS

1. Initiate a Government subcontracting report. In order to determine whether or not there is a need for more Government action to ensure competitive subcontracting, there needs to be a method for determining the current extent of competition. A clause could be developed for all Government prime contracts requiring the prime contractor to report the basis upon which subcontract awards have been made. The report could go from the prime contractor to a specified CAO via the contracting office for consolidation with statistics from other contractors. In order for this to work, there would have to be specific definitions of subcontract, subcontractor, and adequate competition

included in the clause. The report should include factors such as number of firms solicited, number of responses, evaluation factors and weights, reason for award, and justification of sole source or inadequate competition. These reports could be monitored by the cognizant CAO and would not preclude the need for CFSRs and Government consent to subcontracts. What the report would accomplish would be to determine if any Government actions were required in this area. Failure to comply with the reporting system could result in reductions of final prime contract prices.

The major difficulties with this system would be the addition to the costs of individual contracts and the added work load for already overburdened Government contracting offices. Prime contractors would charge high costs for the reporting burden but these costs could eventually be recovered if action were taken to increase the percentage of competitive awards. The lack of personnel is a primary reason why current Government subcontracting programs are inadequate. Although this program would increase the workload requirement, it may result in actions which would reduce the need for ACO consent through implementation of other programs or reduction of current requirements if competition is found to be adequate or better.

2. Develop a mandatory competitive subcontracting clause. If it is determined that more competition is necessary or desirable in Government subcontracts, the only method of ensuring that there will be compliance to the Government's policy is through the use of a mandatory

subcontracting clause in all prime contracts. This clause should require that all subcontracts be awarded on a competitive basis. Reporting and close monitoring of subcontracts would then be necessary only for the exceptions to this policy thereby reducing CAO workload. The clause should include the definitions of subcontract, subcontractor, and adequate competition to ensure uniform compliance. Monitoring the performance of this policy could take place through a modified CPSR which would include a review of all prime contractors over a threshold much reduced from the current \$10,000,000. Centralization of the responsibility for CPSR would also assist in the uniform implementation of this goal. Penalties for non-compliance could be affected against final contract price and future contract awards.

This clause would also be costly to implement. Prime contractors would probably add in a cost to comply with the clause even if they were already complying with the policy. The potential benefit for the Government could be derived if the savings realized by increased competition were greater than the cost of implementation of the clause.

C. CONTRIBUTION OF THE STUDY

This study was undertaken to identify the nature of competition at the subcontract level and to surface the problems currently being encountered in achieving this competition. It has been shown that subcontracts account for a significant portion of the Federal procurement dollar and that contracting officers should be aware of the manner in

which prime contractors use this money. It is hoped that contracting officers reading this study can derive some ideas on how to motivate their prime contractors to compete their subcontracts and potentially save the Government some money while procuring quality items.

D. AREAS FOR FURTHER RESEARCH

While performing research on this topic, several related topics were encountered which may warrant further research. These included:

(1) A thorough analysis of the subcontracting procedure as used in the Navy's FFG-7 program due to its unique subcontracting policies.

(2) The desirability of direct Government funding of potential subcontractors to increase their capabilities.

(3) The consolidation of the CPSR under one Government agency.

(4) The effect of the new small business requirements on contract prices.

APPENDIX A
RESEARCH QUESTIONS

The following is a sample of the questions used by the researcher in conducting interviews with prime contractors, subcontractors, and Government personnel. These questions were used to lead the discussions with interviewees.

PRIME CONTRACTORS

What percentage of your subcontracts are sole source?
Competitive?

What steps do you take to eliminate sole sources?

Describe your source selection policy and procedures

Define competition.

How do you know that you are achieving adequate competition?

Which items are easiest to compete?

Who are your typical subcontractors?

Do you feel that you are achieving sufficient competition?

What factors determine whether you compete a subcontract?

What problems do you encounter from subcontractors when attempting to compete? The Government?

Do you have a source development program?

How is the Government encouraging you to compete subcontracts?

What actions could the Government take to assist you or make it easier for you to obtain competition?

SUBCONTRACTORS

What percentage of your contracts are awarded on a competitive basis?

Are you a sole source? Why?

How do you develop your markets?

What do you do to become competitive?

Do you feel that there is sufficient competition?

What problems does competitive subcontracting present to subcontractors?

What Government and prime contractor policies are you aware of in the area of competitive subcontracting? What problems do these cause?

What actions would you recommend for the Government to increase competitive subcontracting?

GOVERNMENT

Government contracting personnel were asked:

What percentage of your subcontracts are awarded competitively?

How do you motivate the prime contractors to compete their subcontracts?

What directions and goals are you given by Government policy makers?

Do you become involved in Government consent to subcontracts? How?

What do you consider as adequate competition?

What problems do you encounter in achieving competitive subcontracting?

What policies or changes would enable you to increase the amount of competition?

Government CPSR personnel were asked:

How does CPSR help to encourage subcontract competition?

How effective is the CPSR?

What problems have been encountered in the implementation of the CPSR program?

Government policy makers were asked:

How much competitive subcontracting is there?

What policies have been implemented to encourage competitive subcontracting?

What direction has been given to your subordinate commands?

What actions are currently contemplated?

Do you perceive a need for action to increase competitive subcontracts?



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

April 5, 1976

CIRCULAR NO. A-109

TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

SUBJECT: Major System Acquisitions

1. Purpose. This Circular establishes policies, to be followed by executive branch agencies in the acquisition of major systems.

2. Background. The acquisition of major systems by the Federal Government constitutes one of the most crucial and expensive activities performed to meet national needs. Its impact is critical on technology, on the Nation's economic and fiscal policies, and on the accomplishment of Government agency missions in such fields as defense, space, energy and transportation. For a number of years, there has been deep concern over the effectiveness of the management of major system acquisitions. The report of the Commission on Government Procurement recommended basic changes to improve the process of acquiring major systems. This Circular is based on executive branch consideration of the Commission's recommendations.

3. Responsibility. Each agency head has the responsibility to ensure that the provisions of this Circular are followed. This Circular provides administrative direction to heads of agencies and does not establish and shall not be construed to create any substantive or procedural basis for any person to challenge any agency action or inaction on the basis that such action was not in accordance with this Circular.

4. Coverage. This Circular covers and applies to:

a. Management of the acquisition of major systems, including: ° Analysis of agency missions ° Determination of mission needs ° Setting of program objectives ° Determination of system requirements ° System program planning ° Budgeting ° Funding ° Research ° Engineering ° Development ° Testing and evaluation ° Contracting ° Production ° Program and management control ° Introduction

(No. A-109)

of the system into use or otherwise successful achievement of program objectives.

b. All programs for the acquisition of major systems even though:

(1) The system is one-of-a-kind.

(2) The agency's involvement in the system is limited to the development of demonstration hardware for optional use by the private sector rather than for the agency's own use.

5. Definitions. As used in this Circular:

a. Executive agency (hereinafter referred to as agency) means an executive department, and an independent establishment within the meaning of sections 101 and 104(1), respectively, of Title 5, United States Code.

b. Agency component means a major organizational subdivision of an agency. For example: The Army, Navy, Air Force, and Defense Supply Agency are agency components of the Department of Defense. The Federal Aviation Administration, Urban Mass Transportation Administration, and the Federal Highway Administration are agency components of the Department of Transportation.

c. Agency missions means those responsibilities for meeting national needs assigned to a specific agency.

d. Mission need means a required capability within an agency's overall purpose, including cost and schedule considerations.

e. Program objectives means the capability, cost and schedule goals being sought by the system acquisition program in response to a mission need.

f. Program means an organized set of activities directed toward a common purpose, objective, or goal undertaken or proposed by an agency in order to carry out responsibilities assigned to it.

g. System design concept means an idea expressed in terms of general performance, capabilities, and characteristics of hardware and software oriented either to

(No. A-109)

operate or to be operated as an integrated whole in meeting a mission need.

h. Major system means that combination of elements that will function together to produce the capabilities required to fulfill a mission need. The elements may include, for example, hardware, equipment, software, construction, or other improvements or real property. Major system acquisition programs are those programs that (1) are directed at and critical to fulfilling an agency mission, (2) entail the allocation of relatively large resources, and (3) warrant special management attention. Additional criteria and relative dollar thresholds for the determination of agency programs to be considered major systems under the purview of this Circular, may be established at the discretion of the agency head.

i. System acquisition process means the sequence of acquisition activities starting from the agency's reconciliation of its mission needs, with its capabilities, priorities and resources, and extending through the introduction of a system into operational use or the otherwise successful achievement of program objectives.

j. Life cycle cost means the sum total of the direct, indirect, recurring, nonrecurring, and other related costs incurred, or estimated to be incurred, in the design, development, production, operation, maintenance and support of a major system over its anticipated useful life span.

6. General policy. The policies of this Circular are designed to assure the effectiveness and efficiency of the process of acquiring major systems. They are based on the general policy that Federal agencies, when acquiring major systems, will:

a. Express needs and program objectives in mission terms and not equipment terms to encourage innovation and competition in creating, exploring, and developing alternative system design concepts.

b. Place emphasis on the initial activities of the system acquisition process to allow competitive exploration of alternative system design concepts in response to mission requirements.

c. Communicate with Congress early in the system acquisition process by relating major system acquisition programs to agency mission needs. This communication should follow the requirements of Office of Management and Budget (OMB) Circular No. A-10 concerning information related to budget estimates and related materials.

d. Establish clear lines of authority, responsibility, and accountability for management of major system acquisition programs. Utilize appropriate managerial levels in decisionmaking, and obtain agency head approval at key decision points in the evolution of each acquisition program.

e. Designate a focal point responsible for integrating and unifying the system acquisition management process and monitoring policy implementation.

f. Rely on private industry in accordance with the policy established by OMB Circular No. A-76.

7. Major system acquisition management objectives. Each agency acquiring major systems should:

a. Ensure that each major system: Fulfills a mission need. Operates effectively in its intended environment. Demonstrates a level of performance and reliability that justifies the allocation of the Nation's limited resources for its acquisition and ownership.

b. Depend on, whenever economically beneficial, competition between similar or differing system design concepts throughout the entire acquisition process.

c. Ensure appropriate trade-off among investment costs, ownership costs, schedules, and performance characteristics.

d. Provide strong checks and balances by ensuring adequate system test and evaluation. Conduct such tests and evaluation independent, where practicable, of developer and user.

e. Accomplish system acquisition planning, built on analysis of agency missions, which implies appropriate resource allocation resulting from clear articulation of agency mission needs.

(No. A-109)

f. Tailor an acquisition strategy for each program, as soon as the agency decides to solicit alternative system design concepts, that could lead to the acquisition of a new major system and refine the strategy as the program proceeds through the acquisition process. Encompass test and evaluation criteria and business management considerations in the strategy. The strategy could typically include: ° Use of the contracting process as an important tool in the acquisition program ° Scheduling of essential elements of the acquisition process ° Demonstration, test, and evaluation criteria ° Content of solicitations for proposals ° Decisions on whom to solicit ° Methods for obtaining and sustaining competition ° Guidelines for the evaluation and acceptance or rejection of proposals ° Goals for design-to-cost ° Methods for projecting life cycle costs ° Use of data rights ° Use of warranties ° Methods for analyzing and evaluating contractor and Government risks ° Need for developing contractor incentives ° Selection of the type of contract best suited for each stage in the acquisition process ° Administration of contracts.

g. Maintain a capability to: ° Predict, review, assess, negotiate and monitor costs for system development, engineering, design, demonstration, test, production, operation and support (i.e., life cycle costs) ° Assess acquisition cost, schedule and performance experience against predictions, and provide such assessments for consideration by the agency head at key decision points ° Make new assessments where significant costs, schedule or performance variances occur ° Estimate life cycle costs during system design concept evaluation and selection, full-scale development, facility conversion, and production, to ensure appropriate trade-offs among investment costs, ownership costs, schedules, and performance ° Use independent cost estimates, where feasible, for comparison purposes.

8. Management structure.

a. The head of each agency that acquires major systems will designate an acquisition executive to integrate and unify the management process for the agency's major system acquisitions and to monitor implementation of the policies and practices set forth in this Circular.

b. Each agency that acquires--or is responsible for activities leading to the acquisition of--major systems will

(No. A-109)

establish clear lines of authority, responsibility, and accountability for management of its major system acquisition programs.

c. Each agency should preclude management layering and placing nonessential reporting procedures and paperwork requirements on program managers and contractors.

d. A program manager will be designated for each of the agency's major system acquisition programs. This designation should be made when a decision is made to fulfill a mission need by pursuing alternative system design concepts. It is essential that the program manager have an understanding of user needs and constraints, familiarity with development principles, and requisite management skills and experience. Ideally, management skills and experience would include: ° Research and development ° Operations ° Engineering ° Construction ° Testing ° Contracting ° Prototyping and fabrication of complex systems ° Production ° Business ° Budgeting ° Finance. With satisfactory performance, the tenure of the program manager should be long enough to provide continuity and personal accountability.

e. Upon designation, the program manager should be given budget guidance and a written charter of his authority, responsibility, and accountability for accomplishing approved program objectives.

f. Agency technical management and Government laboratories should be considered for participation in agency mission analysis, evaluation of alternative system design concepts, and support of all development, test, and evaluation efforts.

g. Agencies are encouraged to work with each other to foster technology transfer, prevent unwarranted duplication of technological efforts, reduce system costs, promote standardization, and help create and maintain a competitive environment for an acquisition.

9. Key decisions. Technical and program decisions normally will be made at the level of the agency component or operating activity. However, the following four key decision points should be retained and made by the agency head:

(No. A-109)

a. Identification and definition of a specific mission need to be fulfilled, the relative priority assigned within the agency, and the general magnitude of resources that may be invested.

b. Selection of competitive system design concepts to be advanced to a test/demonstration phase or authorization to proceed with the development of a noncompetitive (single concept) system.

c. Commitment of a system to full-scale development and limited production.

d. Commitment of a system to full production.

10. Determination of mission needs.

a. Determination of mission need should be based on an analysis of an agency's mission reconciled with overall capabilities, priorities and resources. When analysis of an agency's mission shows that a need for a new major system exists, such a need should not be defined in equipment terms, but should be defined in terms of the mission, purpose, capability, agency components involved, schedule and cost objectives, and operating constraints. A mission need may result from a deficiency in existing agency capabilities or the decision to establish new capabilities in response to a technologically feasible opportunity. Mission needs are independent of any particular system or technological solution.

b. Where an agency has more than one component involved, the agency will assign the roles and responsibilities of each component at the time of the first key decision. The agency may permit two or more agency components to sponsor competitive system design concepts in order to foster innovation and competition.

c. Agencies should, as required to satisfy mission responsibilities, contribute to the technology base, effectively utilizing both the private sector and Government laboratories and in-house technical centers, by conducting, supporting, or sponsoring: ° Research ° System design concept studies ° Proof of concept work ° Exploratory subsystem development ° Tests and evaluations. Applied technology efforts oriented to system developments should be performed in response to approved mission needs.

(No. A-109)

11. Alternative systems.

a. Alternative system design concepts will be explored within the context of the agency's mission need and program objectives--with emphasis on generating innovation and conceptual competition from industry. Benefits to be derived should be optimized by competitive exploration of alternative system design concepts, and trade-offs of capability, schedule, and cost. Care should be exercised during the initial steps of the acquisition process not to conform mission needs or program objectives to any known systems or products that might foreclose consideration of alternatives.

b. Alternative system design concepts will be solicited from a broad base of qualified firms. In order to achieve the most preferred system solution, emphasis will be placed on innovation and competition. To this end, participation of smaller and newer businesses should be encouraged. Concepts will be primarily solicited from private industry; and when beneficial to the Government, foreign technology, and equipment may be considered.

c. Federal laboratories, federally funded research and development centers, educational institutions, and other not-for-profit organizations may also be considered as sources for competitive system design concepts. Ideas, concepts, or technology, developed by Government laboratories or at Government expense, may be made available to private industry through the procurement process or through other established procedures. Industry proposals may be made on the basis of these ideas, concepts, and technology or on the basis of feasible alternatives which the proposer considers superior.

d. Research and development efforts should emphasize early competitive exploration of alternatives, as relatively inexpensive insurance against premature or preordained choice of a system that may prove to be either more costly or less effective.

e. Requests for alternative system design concept proposals will explain the mission need, schedule, cost, capability objectives, and operating constraints. Each offeror will be free to propose his own technical approach, main design features, subsystems, and alternatives to schedule, cost, and capability goals. In the conceptual and

(No. A-109)

less than full-scale development stages, contractors should not be restricted by detailed Government specifications and standards.

f. Selections from competing system design concept proposals will be based on a review by a team of experts, preferably from inside and outside the responsible component development organization. Such a review will consider: (1) Proposed system functional and performance capabilities to meet mission needs and program objectives, including resources required and benefits to be derived by trade-offs, where feasible, among technical performance, acquisition costs, ownership costs, time to develop and procure; and (2) The relevant accomplishment record of competitors.

g. During the uncertain period of identifying and exploring alternative system design concepts, contracts covering relatively short time periods at planned dollar levels will be used. Timely technical reviews of alternative system design concepts will be made to effect the orderly elimination of those least attractive.

h. Contractors should be provided with operational test conditions, mission performance criteria, and life cycle cost factors that will be used by the agency in the evaluation and selection of the system(s) for full-scale development and production.

i. The participating contractors should be provided with relevant operational and support experience through the program manager, as necessary, in developing performance and other requirements for each alternative system design concept as tests and trade-offs are made.

j. Development of subsystems that are intended to be included in a major system acquisition program will be restricted to less than fully designed hardware (full-scale development) until the subsystem is identified as a part of a system candidate for full-scale development. Exceptions may be authorized by the agency head if the subsystems are long lead time items that fulfill a recognized generic need or if they have a high potential for common use among several existing or future systems.

(No. A-109)

12. Demonstrations.

a. Advancement to a competitive test/demonstration phase may be approved when the agency's mission need and program objectives are reaffirmed and when alternative system design concepts are selected.

b. Major system acquisition programs will be structured and resources planned to demonstrate and evaluate competing alternative system design concepts that have been selected. Exceptions may be authorized by the agency head if demonstration is not feasible.

c. Development of a single system design concept that has not been competitively selected should be considered only if justified by factors such as urgency of need, or by the physical and financial impracticality of demonstrating alternatives. Proceeding with the development of a noncompetitive (single concept) system may be authorized by the agency head. Strong agency program management and technical direction should be used for systems that have been neither competitively selected nor demonstrated.

13. Full-scale development and production.

a. Full-scale development, including limited production, may be approved when the agency's mission need and program objectives are reaffirmed and competitive demonstration results verify that the chosen system design concept(s) is sound.

b. Full production may be approved when the agency's mission need and program objectives are reaffirmed and when system performance has been satisfactorily tested, independent of the agency development and user organizations, and evaluated in an environment that assures demonstration in expected operational conditions. Exceptions to independent testing may be authorized by the agency head under such circumstances as physical or financial impracticability or extreme urgency.

c. Selection of a system(s) and contractor(s) for full-scale development and production is to be made on the basis of (1) system performance measured against current mission need and program objectives, (2) an evaluation of estimated acquisition and ownership costs, and (3) such factors as

contractor(s) demonstrated management, financial, and technical capabilities to meet program objectives.

d. The program manager will monitor system tests and contractor progress in fulfilling system performance, cost, and schedule commitments. Significant actual or forecast variances will be brought to the attention of the appropriate management authority for corrective action.

14. Budgeting and financing. Beginning with FY 1979 all agencies will, as part of the budget process, present budgets in terms of agency missions in consonance with Section 201(i) of the Budget and Accounting Act, 1921, as added by Section 601 of the Congressional Budget Act of 1974, and in accordance with OMB Circular A-11. In so doing, the agencies are desired to separately identify research and development funding for: (1) The general technology base in support of the agency's overall missions, (2) The specific development efforts in support of alternative system design concepts to accomplish each mission need, and (3) Full-scale developments. Each agency should ensure that research and development is not undesirably duplicated across its missions.

15. Information to Congress.

a. Procedures for this purpose will be developed in conjunction with the Office of Management and Budget and the various committees of Congress having oversight responsibility for agency activities. Beginning with FY 1979 budget each agency will inform Congress in the normal budget process about agency missions, capabilities, deficiencies, and needs and objectives related to acquisition programs, in consonance with Section 601(i) of the Congressional Budget Act of 1974.

b. Disclosure of the basis for an agency decision to proceed with a single system design concept without competitive selection and demonstration will be made to the congressional authorization and appropriation committees.

16. Implementation. All agencies will work closely with the Office of Management and Budget in resolving all implementation problems.

17. Submissions to Office of Management and Budget. Agencies will submit the following to OMB:

(No. A-109)

a. Policy directives, regulations, and guidelines as they are issued.

b. Within six months after the date of this Circular, a time-phased action plan for meeting the requirements of this Circular.

c. Periodically, the agency approved exceptions permitted under the provisions of this Circular.

This information will be used by the OMB, in identifying major system acquisition trends and in monitoring implementations of this policy.

18. Inquiries. All questions or inquiries should be submitted to the OMB, Administrator for Federal Procurement Policy. Telephone number, area code, 202-395-4677.

DAC #76-19 27 JULY 1979

7:53

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

(b) In accordance with 1-707.3(b), insert the following clause in negotiated contracts.

SUBCONTRACTING PLAN FOR SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS CONCERNS (NEGOTIATED) (1979 JULY)

(a) The apparent successful offeror, upon request by the contracting officer, shall submit and negotiate a subcontracting plan which addresses separately subcontracting with small business concerns and small disadvantaged business concerns and which shall be included in and made a material part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the contracting officer. Failure to submit and negotiate the subcontracting plan shall make the offeror ineligible for award of a contract. As a minimum, the subcontracting plan shall include—

(1) Separate percentage goals (expressed in terms of percentage of total planned subcontracting dollars) for the utilization as subcontractors of small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals. For the purposes of the subcontracting plan, the contractor shall include all first tier subcontracts to be awarded in performance of this contract, including a proportionate share of products, services, etc., whose costs are normally allocated as indirect or overhead costs when reasonably determined to be attributable to this contract.

(2) The name of an individual within the employ of the offeror who will administer the subcontracting plan of the offeror and a description of the duties of such individual;

(3) A description of the efforts the offeror will make to assure that small business and small disadvantaged business concerns will have an equitable opportunity to compete for subcontracts;

(4) Assurances that the offeror will include the clause entitles Utilization of Small Business and Small Disadvantaged Business Concerns in all subcontracts which offer further subcontracting opportunities and will require all subcontractors (except small business concerns) who receive subcontracts in excess of \$500,000, or in the case of a contract for the construction of any public facility, \$1 million, to adopt a plan in consonance with this clause;

7-104.14

ARMED SERVICES PROCUREMENT REGULATION

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

(5) Assurances that the offeror will submit such periodic reports and cooperate in any studies or surveys as may be required by the contracting agency or the Small Business Administration in order to determine the extent of compliance by the offeror with the subcontracting plan; and

(6) A recitation of the types of records the offeror will maintain to demonstrate procedures which have been adopted to comply with the requirements and goals set forth in the plan, including the establishment of source lists of small business and small disadvantaged business concerns; and efforts to identify and award subcontracts to such small business concerns.

(b) In order to effectively implement this plan the contractor shall:

(1) Issue and promulgate company wide policy statements in support of this effort, develop written procedures and work instructions, and assign specific responsibilities regarding requirements of this clause.

(2) Demonstrate continuing management interest and involvement in support of this effort through such actions as regular reviews of progress and establishment of overall corporate and divisional goals and objectives.

(3) Train and motivate contractor personnel regarding the support of small and small disadvantaged business firms.

(4) Assist small business and small disadvantaged business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business and disadvantaged subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(5) Provide adequate and timely consideration of the potentialities of small business and small disadvantaged business concerns in all "make-or-buy" decisions.

(6) Counsel and discuss subcontracting opportunities with representatives of small and small disadvantaged business firms as are referred by the Small and Disadvantaged Business Utilization Specialist responsible for monitoring performance under this program and representatives of the SBA.

(c) The contractor shall submit DD Form 1140-1 in accordance with instructions provided on the form.

(d) The offeror understands that:

(1) An acceptable plan must, in the determination of the contracting officer, provide the maximum practicable opportunity for small business and small disadvantaged business concerns to participate in the performance of the contract.

7-104.14

ARMED SERVICED PROCUREMENT REGULATION

7:54-A

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

(2) The contracting officer shall notify the contractor in writing of his reasons for determining a subcontracting plan to be unacceptable. Such notice shall be given early enough in the negotiation process to allow the contractor sufficient time to modify the plan within the time limits prescribed.

(3) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the contracting officer in determining the responsibility of the offeror for award of the contract.

(4) Subcontracting plans are not required of small business concerns.

(5) The failure of any contractor or subcontractor to comply in good faith with (i) the clause entitled Utilization of Small Business and Small Disadvantaged Business Concerns or (ii) an approved plan required by this Small Business and Small Disadvantaged Business Subcontracting Plan (Negotiated) provision, will be a material breach of such contract or subcontract.

(End of clause)

(c) In accordance with 1-707.3(c), insert the following clause in formally advertised contracts.

SUBCONTRACTING PLAN FOR SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS CONCERNS (FORMALLY ADVERTISED) (1979)

(a) The apparent low bidder, upon request by the contracting officer, shall submit a subcontracting plan which addresses separately subcontracting with small business concerns and small disadvantaged business concerns, and which shall be included in and made a material part of the resultant contract. The subcontracting plan shall be submitted within the time specified by the contracting officer. Failure to submit the subcontracting plan shall make the bidder ineligible for the award of a contract.

As a minimum, the subcontracting plan shall include:

(1) Separate percentage goals (expressed in terms of percentage of total planned subcontracting dollars) for the utilization as subcontractors of small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals; for the purposes of the subcontracting plan, the contractor shall include all first tier subcontracts to be awarded in performance of this contract, including a proportionate share of products, services, etc., whose costs are normally allocated as indirect or overhead costs when reasonably determined to be attributable to this contract.

7-104.14

7:54-B

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

(2) The name of an individual within the employ of the bidder who will administer the subcontracting plan of the bidder and a description of the duties of such individual;

(3) A description of the efforts the bidder will make to assure that small business and small disadvantaged business concerns will have an equitable opportunity to compete for subcontracts;

(4) Assurances that the bidder will include the clause entitled Utilization of Small Business and Small Disadvantaged Business Concerns in all subcontracts which offer further subcontracting opportunities, and that the bidder will require all subcontractors (except small business concerns) who receive subcontracts in excess of \$1,000,000 in the case of a contract for the construction of any public facility, or in excess of \$500,000 in the case of all other contracts, to adopt a plan in consonance with this clause;

(5) Assurances that the bidder will submit such periodic reports and cooperate in any studies or surveys as may be required by the contracting agency or the Small Business Administration in order to determine the extent of compliance by the bidder with the subcontracting plan; and

(6) A recitation of the types of records the successful bidder will maintain to demonstrate procedures which have been adopted to comply with the requirements and goals set forth in the plan, including the establishment of source lists of small business concerns and small disadvantaged business concerns; and efforts to identify and award subcontracts to such small business concerns.

(b) In order to effectively implement this plan, the contractor shall:

(1) Issue and promulgate company wide policy statements in support of this effort, develop written procedures and work instructions, and assign specific responsibilities regarding the requirements of this clause.

(2) Demonstrate continuing management interest and involvement in support of these programs through such actions as regular reviews of progress and establishment of overall corporate and divisional goals and objectives.

(3) Train and motivate contractor personnel in support of these programs.

(4) Assist small business and small disadvantaged business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the

7-104.14

ARMED SERVICES PROCUREMENT REGULATION

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

Contractor's lists of potential small business and disadvantaged subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns as opportunity to compete over a period of time.

(5) Provide adequate and timely consideration of the potentialities of small business and small disadvantaged business concerns in all "make-or-buy" decisions.

(6) Counsel and discuss subcontracting opportunities with representatives of small and disadvantaged business firms as are referred by the Small and Disadvantaged Business Utilization Specialist responsible for monitoring performance under this program and representatives of the SBA.

(c) The contractor shall submit DD Form 1140-1 in accordance with instructions provided on the form.

(d) The bidder understands that:

(1) Prior compliance of the bidder with other such subcontracting plans under previous contracts will be considered by the contracting officer in determining the responsibility of the bidder for award of the contract.

(2) Subcontracting plans are not required of small business concerns.

(3) The failure of any contractor or subcontractor to comply in good faith with (i) the clause entitled Utilization of Small Business Concerns and Small Disadvantaged Business Concerns, or (ii) the terms of any subcontracting plan required by this Small Business and Small Disadvantaged Business Subcontracting Plan (Advertised) provision, will be a material breach of the contract or subcontract.

(End of Clause)

(d) The following clause is an example for use in negotiated contracts in accordance with 1-707.3(d).

INCENTIVE SUBCONTRACTING PROGRAM FOR SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS CONCERNS (1979 JULY)

(1) The contractor has established, in his subcontracting plan, the following goals for awards to small business and small disadvantaged business concerns:

(i) _____ percent of the total planned subcontract amount of \$ _____ to small business concerns, and

(ii) _____ percent of the total planned subcontract amount of \$ _____ to small business concerns owned and controlled by socially and economically disadvantaged individuals.

(2) In recognition of any extraordinary efforts by the contractor in exceeding the small business and small dis-

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

advantaged business concerns in contracting goals established by (1) above, the contractor may, at his election and in his sole discretion, charge a fixed fee to the contractor or of not to exceed _____ of the total dollar value of all such subcontract awards in excess of each goal in (1) above. The contracting officer may determine that such excess was not due to efforts by the contractor, i.e., subcontractor cost overruns, or where the actual subcontract amount exceeds that estimated in the subcontract plan; or there were planned subcontracts not disclosed in the subcontract plan during contract negotiation. Determinations under this paragraph shall not be subject to the clause hereof entitled Disputes.

(3) If the contract is a cost-plus-fixed-fee type, the total of the fixed fee and the incentive payments made pursuant to this clause is subject to the limitations set forth in DAR 3-405.6(c)(2).

*Exact percentage (not to exceed 10 percent) to be inserted into the contract document.

(End of Clause)

7-104.15 Examination of Records by Comptroller General. Insert the following clause in all contracts except contracts for public utility services at rates not in excess of those established for uniform applicability to the general public, or at such rates plus reasonable connection charges incident to such services, or unless exempted under 6-704 or 6-1001

EXAMINATION OF RECORDS BY COMPTROLLER GENERAL (1975 JUN)

(a) This clause is applicable if the amount of this contract exceeds \$10,000 and was entered into by means of negotiation, including small business restricted advertising, but is not applicable if this contract was entered into by means of formal advertising.

(b) The Contractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of three years after final payment under this contract or such lesser time specified in either Appendix M of the Armed Services Procurement Regulation or the Federal Procurement Regulations Part 1-20, as appropriate, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to this contract.

(c) The Contractor further agrees to include in all his subcontracts hereunder a provision to the effect that the subcontractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of three years after final payment under the subcontract or such lesser time specified in either Appendix M of the Armed Services Procurement Regulation or the Federal Procurement Regulations Part 1-20, as appropriate, have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor, involving transactions related to the subcontract. The term "subcontract" as used in this clause excludes (i) purchase orders not exceeding \$10,000 and (ii) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.

(d) The periods of access and examination described in (b) and (c) above for records which relate to (i) appeals under the "Disputes" clause of this contract, (ii) litigation or the settlement of claims arising out of the performance of this contract, or (iii) costs and expenses of this contract as to which exception has been taken by the Comptroller General or any of his duly authorized representatives, shall continue until such appeals, litigation, claims or exceptions have been disposed of.

(End of clause)

7-104.15

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

EQUAL OPPORTUNITY PRE AWARD CLEARANCE OF SUBCONTRACTS (1971 OCT)

Notwithstanding the clause of this contract entitled "Subcontracts," the Contractor shall not enter into a first-tier subcontract for an estimated or actual amount of \$1,000,000 or more without obtaining in writing from the Contracting Officer a clearance that the proposed subcontractor is in compliance with equal opportunity requirements and therefore is eligible for award.

(End of clause)

7-104.23 Subcontracts

(a) The following clause shall be inserted in all fixed-price type contracts, in accordance with 23-201.

SUBCONTRACTS (1979 MAR)

(The provisions of this clause do not apply to firm fixed-price contracts and fixed price contracts with economic price adjustment provisions. However, the clause does apply to unpriced modifications under such contracts.)

(a) As used in this clause, the term "subcontract" includes but is not limited to purchase orders, changes and/or modifications thereto.

(b) The Contractor shall notify the Contracting Officer reasonably in advance of entering into any subcontract if the Contractor's procurement system has not been approved by the Contracting Officer and if the subcontract

- (i) is to be a cost-reimbursement, time and materials, or labor-hour contract which it is estimated will involve an amount in excess of twenty-five thousand dollars (\$25,000) including any fee;
- (ii) is proposed to exceed one hundred thousand dollars (\$100,000), or
- (iii) is one of a number of subcontracts, under this contract, with a single subcontractor for the same or related supplies or services which, in the aggregate, are expected to exceed one hundred thousand dollars (\$100,000).

(c) The advance notification required by paragraph (b) above shall include

- (i) a description of the supplies or services to be called for by the subcontract;
- (ii) identification of the proposed subcontractor and an explanation of why and how the proposed subcontractor was selected, including the competition obtained;
- (iii) the proposed subcontract price, together with the Contractor's cost or price analysis thereof;
- (iv) the subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, when such data and certificates are required by other provisions of this contract to be obtained from the subcontractor;
- (v) identification of the type of subcontract to be used;
- (vi) a memorandum of negotiation which sets forth the principal elements of the subcontract price negotiations. A copy of this memorandum shall be retained in the contractor's file for the use of Government reviewing authorities. The memorandum shall be in sufficient detail to reflect the most significant considerations controlling the establishment of initial or revised prices. The memorandum should include an explanation of why cost or pricing data was, or was not required, and, if it was not required in the case of any price negotiation in excess of \$100,000, a statement of the basis for determining that the price resulted from or was based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. If cost or pricing data was submitted and a certificate of cost or pricing data was required, the memorandum shall reflect the extent to which reliance was not placed upon the factual cost or pricing data submitted and the extent to which this data was not used by the contractor in determining the total price objective and in negotiating the final price. The memorandum shall also reflect the extent to which it was recognized in the negotiation that any cost or pricing data submitted by the subcontractor was not accurate, complete, or current, the action taken by the contractor and the subcontractor as a result, and the effect, if any, of such defective data on the total price negotiated. Where the total price negotiated differs significantly from the contractor's total price objective, the memorandum shall explain this difference.

7-104.23

ARMED SERVICES PROCUREMENT REGULATION

7:60

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

- (vii) when incentives are used, the memorandum of negotiation shall contain an explanation of the incentive fee profit plan identifying each critical performance element, management decisions used to quantify each incentive element, reasons for incentives on particular performance characteristics, and a brief summary of trade off possibilities considered as to cost, performance, and time, and
- (viii) the Subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract to be obtained from the subcontractor.

(d) The Contractor shall not enter into any subcontract for which advance notification to the Contracting Officer is required by this clause, without the prior written consent of the Contracting Officer, provided that the Contracting Officer, in his discretion, may ratify in writing any subcontract. Such ratification shall constitute the consent of the Contracting Officer required by this paragraph.

(e) Neither consent by the Contracting Officer to any subcontract or any provisions thereof nor approval of the Contractor's procurement system shall be construed to be a determination; (i) of the acceptability of any subcontract terms or condition, (ii) of the acceptability of any subcontract price or of any amount paid under any subcontract, or (iii) to relieve the Contractor of any responsibility for performing this contract; unless such approval or consent specifically provides otherwise.

(f) The Contractor agrees that no subcontract placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis.

(g) The Government reserves the right to perform contractor procurement system reviews as set forth in ASPR Section XXIII.

(End of clause)

(b) Insert the following additional subparagraph to the clause in (a) above in accordance with 23-201.1(b)(iii).

(h) Notwithstanding approval of the Contractor's procurement system, the Contractor shall not enter into certain subcontracts or classes of subcontracts set forth elsewhere in this contract without the prior written consent of the Contracting Officer. With respect to subcontracts so identified, the advance notification requirements of paragraph (b) above shall be fully applicable even though the Contractor's system has been approved and those subcontracts are within the scope of the approval.

7-104.24 Government Property

(a) *Government Property Clause.* Except as provided in (b) through (d) and (f) below, insert the following clause when a Department is to furnish to the contractor, or the contractor is to acquire Government property.

GOVERNMENT PROPERTY (FIXED PRICE) (1968 SEP)

(a) *Government-Furnished Property.* The Government shall deliver to the Contractor, for use in connection with and under the terms of this contract, the property described as Government-furnished property in the Schedule or specifications, together with such related data and information as the Contractor may request and as may reasonably be required for the intended use of

7-104.24

ARMED SERVICES PROCUREMENT REGULATION

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

sistent with this contract, including demand consequent upon default termination, (iii) the date of transmittal by the Government to the Contractor of a proposed supplemental agreement to confirm completed negotiations fixing the amount, or (iv) if this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or in connection with a negotiated pricing agreement not confirmed by contract supplement.

(End of clause)

The interest rates established by the Secretary of the Treasury will be published in the Federal Register every six months. The current rate may also be obtained from the Departmental Contract Finance Office representative.

7-104.40 Competition in Subcontracting. The following clause shall be included in all negotiated contracts over \$10,000, except in firm fixed-price contracts where award is on the basis of effective price competition or where prices are established by law or regulation.

COMPETITION IN SUBCONTRACTING (1962 APR)

The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

(End of clause)

7-104.41 Audit by Department of Defense

(a) Insert the following clause in all contracts (except those entered into by formal advertising which are not expected to exceed \$100,000).

AUDIT BY DEPARTMENT OF DEFENSE (1978 AUG)

(a) *General.* The Contracting Officer or his representatives shall have the audit and inspection rights described in the applicable paragraphs (b), (c) and (d) below.

(b) *Examination of Costs.* If this is a cost reimbursement type, incentive, time and materials, labor hour, or price redeterminable contract, or any combination thereof, the Contractor shall maintain, and the Contracting Officer or his representatives shall have the right to examine books, records, documents, and other evidence and accounting procedures and practices, sufficient to reflect properly all direct and indirect costs of whatever nature claimed to have been incurred and anticipated to be incurred for the performance of this contract. Such right of examination shall include inspection at all reasonable times of the Contractor's plants, or such parts thereof, as may be engaged in the performance of this contract.

(c) *Cost or Pricing Data.* If the Contractor submitted cost or pricing data in connection with the pricing of this contract or any change or modification thereto, unless such pricing was based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation, the Contracting Officer or his representatives who are employees of the United States Government shall have the right to examine all books, records, documents and other data of the Contractor related to the negotiation, pricing or performance of such contract, change or modification, for the purpose of evaluating the accuracy, completeness and currency of the cost or pricing data submitted. Additionally, in the case of pricing any change or modification exceeding \$100,000 to formally advertised contracts, the Comptroller General of the United States or his representatives who are employees of the United States Government shall have such rights. The right of examination shall extend to all documents necessary to permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used thereon.

(d) *Reports.* If the Contractor is required to furnish Contractor Cost Data Reports (CCDR), Contract Fund Status Reports (CFSR), or Cost Performance Reports (CPR) the Contracting Of-

7-104.41

ARMED SERVICES PROCUREMENT REGULATION

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

tract (or to require repayment of any fixed fee theretofore paid) in such amount as may be equitable under the circumstances; or (iii) may terminate this contract for default as provided in the clause of this contract entitled "Termination." Failure to agree to the amount of any such increased cost to be charged to the Contractor or to such reduction in, or repayment of, the fixed fee shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes."

(c) Notwithstanding the provisions of paragraph (b) hereof, the Government may at any time require the correction or replacement by the Contractor, without cost to the Government, of supplies or lots of supplies which are defective in material or workmanship, or otherwise not in conformity with the requirements of this contract, if such defects or failures are due to fraud, lack of good faith or willful misconduct on the part of any of the Contractor's directors or officers, or on the part of any of his managers, superintendents, or other equivalent representatives, who has supervision or direction of (i) all or substantially all of the Contractor's business, or (ii) all or substantially all of the Contractor's operations at any one plant or separate location in which this contract is being performed, or (iii) a separate and complete major industrial operation in connection with the performance of this contract. The Government may at any time also require correction or replacement by the Contractor, without cost to the Government, of any such defective supplies or lots of supplies if the defects or failures are caused by one or more individual employees selected or retained by the Contractor after any such supervisory personnel has reasonable grounds to believe that such employee is habitually careless or otherwise unqualified.

(d) Corrected supplies or replaced supplies shall be subject to the provisions of this clause in the same manner and to the same extent as supplies originally delivered under this contract.

(e) The Contractor shall make his records of all inspection work available to the Government during the performance of this contract and for such longer period as may be specified in this contract.

(f) Except as provided in this clause and as may be provided in the Schedule, the Contractor shall have no obligation or liability to correct or replace supplies or lots of supplies which at the time of delivery are defective in material or workmanship or otherwise not in conformity with the requirements of this contract.

(g) Except as otherwise provided in the Schedule, the Contractor's obligation to correct or replace Government-furnished property (which is property in the possession of or acquired directly by the Government and delivered or otherwise made available to the Contractor) shall be governed by the provisions of the clause of this contract entitled "Government Property".

(End of clause)

(b) When it is desired to require contractors to maintain an inspection system in accordance with Military Specification MIL-I-45208 (see 14-303), the clause in (a) above shall be inserted in the contract except that the following shall be added as the third sentence of paragraph (a).

The inspection system shall be in accordance with the edition of Military Specification MIL-I-45208 in effect on the date of this contract (1967 AUG)

7-203.6 Assignment of Claims. In accordance with 7-103.8, insert the clause therein.

7-203.7 Examination of Records by Comptroller General. In accordance with 7-104.15, insert the clause therein.

7-203.8 Subcontracts.

(a) In accordance with 23-201.2, and subject to the instructions in (b) below, insert the following clause.

7-203.8**ARMED SERVICES PROCUREMENT REGULATION**

SUBCONTRACTS (1979 MAR)

(a) The Contractor shall notify the Contracting Officer reasonably in advance of entering into any subcontract (as used in this clause, the term "subcontract" includes, but is not limited to, purchase orders, changes, and/or modifications thereto) which (i) is cost-reimbursement type, time and materials or labor-hour, or (ii) is fixed-price type and exceeds in dollar amount either \$25,000 or five percent (5%) of the total estimated cost of this contract, or (iii) provides for the fabrication, purchase, rental, installation, or other acquisition of special test equipment having a value in excess of \$1,000 or of any items of industrial facilities.

(b) In the case of a proposed subcontract, including but not limited to purchase orders, changes, and/or modifications thereto) which (i) is cost-reimbursement type, time and materials, or labor-hour, and would involve an estimated amount in excess of \$10,000, including any fee, or (ii) is proposed to exceed \$100,000, or (iii) is one of a number of subcontracts under this contract with a single subcontractor for the same or related supplies or services which, in the aggregate are expected to exceed \$100,000; the advance notification required by (a) above shall include:

- (1) a description of the supplies or services to be called for by the subcontract,
- (2) identification of the proposed subcontractor and an explanation of why and how the proposed subcontractor was selected, including the degree of competition obtained,
- (3) the proposed subcontract price, together with the Contractor's cost or price analysis thereof,
- (4) the subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, when such data and certificate are required, by other provisions of this contract, to be obtained from the subcontractor,
- (5) identification of the type of subcontract to be used,
- (6) a memorandum of negotiation which sets forth the principal elements of the subcontract price negotiations. A copy of this memorandum shall be retained in the contractor's file for the use of Government reviewing authorities. The memorandum shall be in sufficient detail to reflect the most significant considerations controlling the establishment of initial or revised prices. The memorandum should include an explanation of why cost or pricing data was, or was not required, and, if it was not required in the case of any price negotiation in excess of \$100,000, a statement of the basis for determining that the price resulted from or was based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. If cost or pricing data was submitted and a certificate of cost or pricing data was required, the memorandum shall reflect the extent to which reliance was not placed upon the factual cost or pricing data submitted and the extent to which this data was not used by the contractor in determining the total price objective and in negotiating the final price. The memorandum shall also reflect the extent to which it was recognized in the negotiation that any cost or pricing data submitted by the subcontractor was not accurate, complete, or current, the action taken by the contractor and the subcontractor as a result; and the effect, if any, of such defective data on the total price negotiated. Where the total price negotiated differs significantly from the Contractor's total price objective, the memorandum shall explain this difference.

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

(7) when incentives are used, the memorandum of negotiation shall contain an explanation of the incentive fee/profit plan identifying each critical performance element, management decisions used to quantify each incentive element, reasons for incentives on particular performance characteristics, and a brief summary of trade off possibilities considered as to cost, performance, and time; and

(8) the subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract to be obtained from the subcontractor.

(c) The Contractor shall obtain the written consent of the Contracting Officer prior to placing any subcontract for which advance notification is required under (a) above. The Contracting Officer may, in his discretion, ratify in writing any such subcontract. Such action shall constitute the consent of the Contracting Officer as required by this paragraph (c).

(d) The Contractor agrees that no subcontract placed under this contract shall provide for payment on a cost-plus-a percentage-of-cost basis.

(e) Neither consent by the Contracting Officer to any subcontract or any provisions thereof nor approval of the Contractor's procurement system shall be construed to be a determination; (i) of the acceptability of any subcontract terms or condition, (ii) of the acceptability of any subcontract price or of any amount paid under any subcontract, or (iii) to relieve the Contractor of any responsibility for performing this contract; unless such approval or consent specifically provides otherwise.

(f) The Contractor shall give the Contracting Officer immediate notice in writing of any action or suit filed, and prompt notice of any claim made against the Contractor by any subcontractor or vendor which, in the opinion of the Contractor, may result in litigation, related in any way to this contract with respect to which the Contractor may be entitled to reimbursement from the Government.

(g) Notwithstanding (c) above, the Contractor may enter into subcontracts within (i) and (ii) of (a) above without the consent of the Contracting Officer if the Contracting Officer has approved in writing the Contractor's procurement system and the subcontract is within the scope of the approval. (This subparagraph (g) however, shall not be applicable to those subcontracts subject to subparagraph (k) below, if any.)

(h) The Contractor shall (i) insert in each incentive price revision or price redetermination subcontract hereunder the substance of the "Limitation on Payments" paragraph set forth in the appropriate clause prescribed by paragraph 7-108 or 7-109 of the Armed Services Procurement Regulation, including subparagraph (4) thereof, modified to omit mention of the Government and reflect the position of the Contractor as purchaser and of the subcontractor as vendor, and to omit that portion of subparagraph (3) thereof relating to tax credits, and (ii) include in each cost-reimbursement type subcontract hereunder a requirement that each price redetermination and incentive price revision subcontract thereunder will contain the substance of the "Limitation on Payments" provision, including subparagraph (4) thereof, modified as outlined in (i) above.

7-203.8

ARMED SERVICES PROCUREMENT REGULATION

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

(i) To facilitate small business participation in subcontracting under this contract, the Contractor agrees to provide progress payment on the fixed price subcontracts of those subcontractors which are small business concerns, in conformity with the standard for customary progress payments stated in paragraphs 803 and 814 of Appendix I of the Armed Services Procurement Regulation, is in effect on the date of this contract. The Contractor further agrees that the need for such progress payments will not be considered as a handicap or adverse factor in the award of subcontracts.

(j) The Government reserves the right to perform contractor procurement system review as set forth in FAR Section XXIII.

(End of clause)

(b) Insert the following additional subparagraph to the clause in (a) above in accordance with 23-201.2(d)

(k) Notwithstanding approval of the Contractor's procurement system, the Contractor shall not enter into certain subcontracts or classes of subcontracts set forth elsewhere in this contract without the prior written consent of the Contracting Officer. With respect to subcontracts so identified, the advance notification requirements of paragraph (a) above shall be fully applicable even though the Contractor's procurement system has been approved and those subcontracts are within the scope of the approval.

(c) In contracts with educational institutions, change "(iii)" in paragraph (a) of the clause in (a) above to read:

(iii) provides for the fabrication, purchase, rental, installation, or other acquisition of equipment or of industrial facilities. (1975 OCT)

(d) In accordance with 23-201.4 insert the Equal Opportunity Pre-Award Clearance of Subcontracts clause in 7-104.22.

7-203.9 *Utilization of Small Business Concerns* In accordance with 1-707.3(a) and (b), insert one or both of the clauses in 7-104.14

7-203.10 *Termination* In accordance with 8-702(a), insert the following clause

TERMINATION (1973 APR)

(a) The performance of work under the contract may be terminated by the Government in accordance with this clause in whole, or from time to time in part.

(b) Whenever the Contractor shall default in performance of this contract in accordance with its terms (including in the term "default" any such failure by the Contractor to make progress in the prosecution of the work hereunder as endangers such performance), and shall fail to cure such default within a period of ten days (or such longer periods as the Contracting Officer may allow) after receipt from the Contracting Officer of a notice specifying the default, or

7-203.10

ARMED SERVICES PROCUREMENT REGULATION

CONTRACT CLAUSES AND SOLICITATION PROVISIONS

7-2003.73 *Solicitation Provision for Dismantling, Demolition or Removal of Improvements.* In accordance with 4-503, insert the following provision for solicitations for dismantling, demolition or removal of improvements.

BONDS OR OTHER SECURITY (1977 APR)

A bid guarantee in the penal sum of \$..... must accompany the bid. Within ten (10) days after receipt of a notice of award, the Contractor shall furnish a performance bond (Standard Form 25) in the penal sum of \$..... and payment, in full, of any sum due the Government. The bond of any surety company holding a certificate of authority from the Secretary of the Treasury as an acceptable surety on Federal bonds will be accepted. Individual sureties will be accepted if each such surety deposits with the Contracting Officer cash, bonds, or notes of the United States, or certified check drawn to the order of the office designated for contract administration, or such other security as the Contracting Officer may deem necessary, for the required amount of the guaranty, under the agreement that the collateral so deposited shall remain in the possession and control of the Treasurer of the United States until the completion of the contract. The formal contract and notice to proceed will be issued on receipt of an acceptable performance bond and payment of any sum due the Government.

(End of provision)

7-2003.74 *Small Disadvantaged Business Concern.* Include the following representation in accordance with 1-707.3(e).

SMALL DISADVANTAGED BUSINESS CONCERN (1979 JULY)

(a) The offeror represents that he () is, () is not, a small business concern owned and controlled by socially and economically disadvantaged individuals. The term "small business concern" means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto. The term "small business concern owned and controlled by socially and economically disadvantaged individuals" means a small business concern—

(1) that is at least 51 per centum owned by one or more socially and economically disadvantaged individuals; or, in the case of any publicly owned business, at least 51 per centum of the stock of which is owned by one or more socially or economically disadvantaged individuals; and

(2) whose management and daily business operations are controlled by one or more such individuals.

(b) The offeror shall presume that socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans (such as American Indians, Eskimos, Aleuts, and native Hawaiians), and other minorities or any other individuals found to be disadvantaged by the Small Business Administration pursuant to Section 8(a) of the Small Business Act.

(End)

7-2003.74

an analysis of source development actions that resulted from this activity.

40. Adequate Price Competition:

a. The most acceptable and reasonable price is obtained when adequate price competition exists, since contracts can then generally be awarded to the lowest bidder without further price/cost analysis. But several criteria must be met before the buyer can be assured that he has adequate price competition as indicated in ASPR 3-807. First, an adequate number of responsible offerors must submit bids. There is no magic number, however, a minimum of two offerors is required, but three, four or more may be necessary. The actual number to solicit must be the buyer's decision, made after he has considered all facets of the particular procurement. And of course he must solicit only qualified vendors, adding to the source list only those who have a capability in the particular product field.

(1) A second criterion for adequate price competition is that the potential vendors must be able to satisfy the contractor's requirements. They should not be quoting merely to remain on the contractor's source list or because a willingness to quote on the current requirement might be looked on favorably in the award of future business.

(2) A third criterion for competition is that the vendors must independently contend for the contract to be awarded to the responsive and responsible offeror submitting the lowest evaluated price.

(3) The fourth criterion is that the vendors must submit priced offers responsive to the expressed requirements of the solicitation. The work statements and referenced specifications must be complete and easily understood by the vendors; otherwise, the vendors will base their quotations on their own interpretations of the work requirements. Of course, the buyer cannot always tell whether or not vendors do, in fact, understand, but he can provide them with the opportunity to discuss the work statement with the person or group who developed it. One indication of whether the work statement is complete and understandable is the closeness of the various quotations. A wide variation in quoted prices may be a warning to the buyer not to place the contract with the lowest bidder without investigating his price further.

(4) The above criteria for adequate price competition should be met whenever contracts are to be awarded to the lowest bidder without additional price/cost analysis. Whether there is price competition for a given procurement is a matter of judgment to be based on an evaluation of whether each of the foregoing conditions have been satisfied. Generally, in making this judgment the smaller number of offerors, the greater the need for close evaluation.

(5) Even though all the criteria for adequate price competition may not be present -- if, for example, the specifications cannot be made completely definitive -- the buyer should still obtain several quotations, if it is practicable and feasible for him to do so. In these cases, however, he cannot be sure that the lowest price is reasonable --and he must undertake some form of price/cost analysis. His analysis may be nothing more than a simple review of price history for the same or similar product. Or, it may be an intensive analysis of every cost element of the vendor's quotation, coupled with an independent in-house estimate. The intensiveness of the analysis he makes depends on several factors, including the dollar amount involved in the procurement, the degree of competition present, his past experience with the vendor, the complexity of the item, and so on.

(6) If a vendor has received several successive production contracts for a part having a specific design, effective competition on subsequent procurement may not be possible. If, for example, the tooling is owned by the vendor, competition may be precluded because other vendors' would have to include expensive tooling charges in their quotations. But this is not always the case, and buyers sometimes change suppliers of specially designed parts after several follow-on contracts. It should be kept in mind that competitive bidding may be an effective way to keep a vendor working toward even greater efficiency. It also serves to eliminate the possibility that a single source may exploit his position by forcing unreasonable prices and other concessions from the buyer. Moreover, through competitive bidding an alternate source may be discovered who, through some technical or manufacturing break-through, can perform more satisfactorily than the existing source.

(7) The buyer should always use judgement in determining the number of sources to solicit; however, in no case should he request quotations from unqualified sources just to show a large number of

sources being solicited. This paragraph of the report should contain statistics on the procurements examined in accordance with the format in Attachment 4, Statistical Information.

b. Review and evaluation. The contractor's attitude toward the placement of contracts on a competitive basis and his actual practice in this regard can be determined from his policies and procedures, the purchase-order samples, and cognizant procurement personnel.

(1) His policies and procedures should state the circumstances under which an award may be made to the lowest responsive bidder without further price/cost analysis and those under which further analysis should be made even though competitive bids have been obtained.

(2) The purchase-order samples will show how the policies and procedures are being applied. From the samples, the review team can determine the percentage of procurements on which competitive quotations were obtained. The samples will also reveal the average number of bids received on competitively bid procurements; this is a measure of the "depth" of competition.

(3) The purchase-order samples should be reviewed to determine whether or not the contractor is actually getting adequate and effective competition in those instances when orders are placed with the lowest bidder. Review of the reports on vendor capability, discussion with buying personnel, and its own knowledge of vendors should help the review team to determine whether an adequate number of qualified vendors has submitted quotations on any one particular purchase order. How active the vendors were in seeking the business may be determined from a review of past prices paid for the same or similar product and from discussions with the cognizant buyer. Whether the work statement is complete and has been understood can be determined by the closeness of the quotations. If two or three low quotations are relatively close together, it may mean that the work statement is well defined and that the bidders are all quoting with the same understanding of the requirement.

(4) In the case of purchase-order samples, where competition was not sought -- that is, if the source solicited was a single or sole source -- the file documentation should be reviewed to see whether the lack of competition is justified. When an order is placed with other than the low bidder, the review team should review the justifi-

cation for the award.

(5) In its report, the review team should discuss whether the contractor solicits competitive quotations whenever competition is feasible -- as indicated by the nature of the procurement, the lead time, the availability of qualified sources, and so forth. The review report should also show the depth of competition, that is, whether or not the number of bidders is sufficient. In addition, it should discuss whether price/cost analysis was performed in instances where award was made to the lowest bidder but where the review team had reason to doubt that adequate and effective competition was, in fact, obtained.

41. Single-Sole-Source Procurement - Second Source Development:

a. Identifying competitive potential. Materials management has the responsibility for establishing buyer discipline in seeking second sources. Buyers must be competition oriented. Too often, procurement files reflect that Company A is the only source when in actuality a little more effort on the buyer's part might have resulted in obtaining good competitive quotes. It is recognized that a single source which has been furnishing an item for several years may have the edge when the item is up for consideration. However, the threat of competition may have a salutary effect, and result in a single/sole-source supplier reducing his price. Unless the materials' manager takes a hard look at his noncompetitive procurements and endeavors to compete them, there can be little assurance to the Government that the price being paid is fair and reasonable.

b. Procurement should have a continual program to review and categorize existing single/sole-source inventory and line items. An item-by-item review of significant dollar purchases should be made and recorded as subject to competition, or not subject to competition. The results of this item review can be grouped into three categories:

(1) Those items which can and will be completed.

(2) Those items which definitely cannot be competed, for sound reasons (such as configuration control, program too limited to bring in new sources, cost of sourcing outweighing savings to be realized).

BIBLIOGRAPHY

1. Analysis of Extent of Competitive Procurement By DOD Prime Contractors, Logistics Management Institute, 1964.
2. Bennett, J.J., Department of Defense Systems Acquisition Management: Congressional Criticism and Concern, Department of Defense Systems Management School, May 1974.
3. Comptroller General of the United States, Report to Congress, The Mandatory Small Business Subcontracting Test: Considerations for Public Law 95-507's New Subcontracting Program, United States General Accounting Office, 11 May 1979
4. Comptroller General of the United States, Report to Congress, Subcontracting by Department of Defense Prime Contractors; Integrity, Pricing, and Surveillance, November 1975.
5. Department of Defense, Armed Services Procurement Regulation Manual for Contract Pricing, September 1975 ed.
6. Department of Defense, Armed Services Procurement Regulation Supplement No. 1, Guide for Conducting Contractor Procurement System Review, March 1977.
7. Department of Defense, Defense Acquisition Regulation (DAR), 1976 ed.
8. Department of Defense Directive 5000.1, "Major System Acquisitions," 18 January 1977.
9. Department of Energy, Guide to the Performance of DOE Contractor Procurement System Reviews, October 1978.
10. Department of the Navy, Navy Guide For Contract Managers, March 1973.
11. Deputy Secretary of Defense Memorandum for Secretary of the Army, Secretary of the Navy, Secretary of the Air Force, and Director, Defense Logistics Agency, Subject: Need to Increase Competition in Defense Acquisitions, 21 June 1979.
12. Evans, Charles D., An Inquiry Into the Use of an Award Fee for Motivation of Subcontract Management, Defense Systems Management School, May 1976.
13. Johnson, R.E. and Hall, G.R., Public Policy Toward Subcontracting, The Rand Corporation, May 1965.

14. Juvette, K., Organizational and Communication Realities in Subcontract Management, Defense Systems Management School, May 1975.
15. Lee, L.Jr. and Dobler, D.W., Purchasing and Materials Management Text and Cases, McGraw-Hill, 1977.
16. Logistics Management Institute, The DOD-Contractor Relationship, Washington, D.C., November 1973.
17. Office of the Assistant Secretary of Defense (installations and Logistics), DOD Manual For Contractor Procurement System Reviews, January 1973.
18. Office of the Assistant Secretary of Defense (Installations and Logistics), Multi-Year Procurement at the Subcontractor Level, Logistics Management Institute, Washington, D.C., June 1967.
19. Office of the Secretary of the Navy, Memorandum For the Chief of Naval Operations, Subject: Need to Increase Competition in Navy Acquisitions, 10 September 1979.
20. Office of the Secretary of the Navy, Memorandum For the Deputy Secretary of Defense, Subject: Need to Increase Competition in Defense Acquisition, 10 September 1979.
21. Office of Management and Budget Circular A-109, Major System Acquisitions, 5 April 1976.
22. Parkin, W.L., Source Selection, Naval Air Systems Command, Washington, D.C., 1974.
23. Parr, J.O. and Provenzano, A.J., Subcontracting Policy in Major Systems Acquisitions, Logistics Management Institute, Washington, D.C., November 1976.
24. Patterson, R.E., Program Management and the Subcontractor: A Case Study of the A-10 Experience, Air War College, Maxwell Air Force Base, Alabama, April 1977.
25. Report of the Audit of Small Business Activities in the Department of Defense, Defense Audit Service, Arlington, Virginia, January 1978.
26. Report of the Commission on Government Procurement, United States Government Printing Office, Washington, D.C., February 1972.
27. Rich, M.D., Congress and Competition, The Rand Corporation, Santa Monica, April 1977.
28. Turner, A.E., Source Selection in DOD: A Comparison of Procedures and Techniques, Defense Systems Management School, Ft. Belvoir, Virginia, November 1975.

29. Whelan, J.W. and Pasley, R.S., Cases and Materials on Federal Government Contracts, Foundation Press, 1975.

INTERVIEWS

30. Beat, Roy, Director of Contracts, Rockwell International, Lakewood, California, August 1979.
31. Bennett, T., Director of Contracts, Garrett Air Research Corporation, August 1979.
32. Brewer, W., Director of Sales, Sargent Industries, August 1979.
33. Davis, R., Procurement Assistance and Control Division, Naval Supply Systems Command, September 1979.
34. Johnson, Clinton, Office of Federal Procurement Policy, September 1979.
35. Kilby, H.R., Purchasing Agent, Subcontracts, General Dynamics, Pomona Division, September 1979.
36. Parkin, W.L., Director of Contracts, Joint Cruise Missile Project Office, September 1979.
37. Pickens, G.L., Assistant Project Manager, Guided Missile Frigate Ship Acquisition Project Office, Naval Sea Systems Command, October 1979.
38. Ridel, M., Director of Material, Hughes Aircraft, August 1979.
39. Roellig, LCOL, USAF, Air Force Systems Command, September 1979.
40. Ruppmann, H.O., LCDR, SC, USN, Director of Contracts, Navy Regional Contracting Office, Washington, D.C., September 1979.
41. Schrum, R.W., LCDR, SC, USN, Director of Contracts, Navy Regional Contracting Office, Long Beach, California, September 1979.
42. Spangler, C.R., Director of Subcontracts, TRW, Redondo Beach, California, September 1979.
43. Strelow, R., Contractor Procurement Systems Review Branch, Defense Logistics Agency, Washington, D.C., September 1979.

- 44. Tesko, S., Office of the Under Secretary of Defense for Research and Engineering, September 1979.
- 45. Trimble, R.F., Office of the Under Secretary of Defense for Research and Engineering, September 1979.
- 46. Wheeler, L.D., CDR, SC, USN, Naval Material Command, September 1979.
- 47. Whitaker, J., Purchasing Agent, Subcontracts, General Dynamics, Pomona Division, September 1979.

INITIAL DISTRIBUTION LIST

	No. Copies
1. Defense Documentation Center Cameron Station Alexandria, Virginia 22314	2
2. Library, Code 0142 Naval Postgraduate School Monterey, California 93940	2
3. Defense Logistics Studies Information Exchange U. S. Army Logistics Management Center Fort Lee, Virginia 23801	1
4. Department Chairman, Code 54 Department of Administrative Sciences Naval Postgraduate School Monterey, California 93940	1
5. LCDR David V. Lamm, Code 54LT Department of Administrative Sciences Naval Postgraduate School Monterey, California 93940	1
6. LCDR Marshall Sneiderman, Code 54LT Department of Administrative Sciences Naval Postgraduate School Monterey, California 93940	1
7. LT David A. Capizzi, SC, USN PO Box 123 Summerville, South Carolina 29483	1

Thesis
C19477 Capizzi
c.2

186736

The need to increase e
competition at the sub-b-
contract level.

5 JAN 84

29202

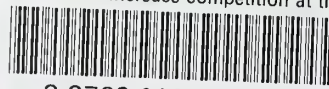
Thesis
C19477 Capizzi
c.2

186736

The need to increase
competition at the sub-
contract level.

thesC19477

The need to increase competition at the



3 2768 002 08501 1

DUDLEY KNOX LIBRARY